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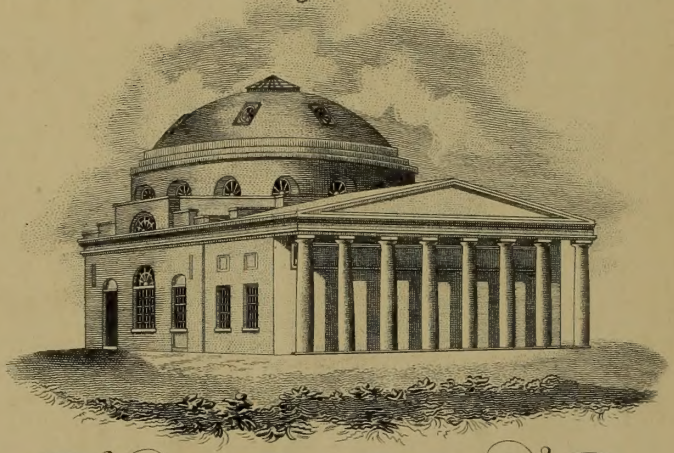

University of Maryland

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

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UNIVERSITY OF MARYLAND

THESES

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[1] Pages are bound out of order as follows: Title-10; 25; 11-end.

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

Author	Title	Notes
Powell, Samuel F.	Mercury	

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

UNIVERSITY OF MARYLAND

THESES

1861 (b)

Morfit, Charles ~~Morfelt~~, ~~C~~. M.	Report of Cases	19p.
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Edwards, ~~A~~. ~~C~~. (Alexander E.)	Scarlet Fever	28p.
Chatard, F. E.,Jr.	Clinical Report of Cases	31p.
Bushey, ~~F~~. A. (a Franklin)	Coxalgia	~~67~~p.
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A report of cases
Submitted to
The Provost, Regents and Faculty
Of Physic
Of the University of Maryland
For the degree of
Doctor of Medicine
by
Charles M. Morfit
of
Maryland.

Baltimore.
February
1861.

IMb
18924

Case II. May 21st. Was called to see Martha Ol-
ort thirty five & of an anemic disposition who was
about to abort. Upon my arrival I found that
the foetus had been repelled from the Uterus;
but that the Placenta had not yet been
ejected. Inquiring I found that the pa-
-tient had conceived eleven times and that
out of the eleven she had miscarried
nine times. I made a per vaginam
examination, & finding the Placenta to
be still within the Uterus, & no hemmo-
-rhage taking place, I concluded as all
the symptoms were favorable to wait
which I did for an hour and a half when
the Placenta being still retained, & the pains
becoming weaker & weaker I introduced
my hand to withdraw it, but found that
the Uterus had contracted around the upper
portion in the form generally known as the

hour-glass contraction. I tried by gently insinuating the tips of my fingers to overcome this contraction, but finding it impossible to do so without great danger of lacerating the womb, I withdrew my hand hoping that after a short time the Uterus would regain its activity, and the pains be renewed with increased force. In this I was disappointed at 8 P.M. I found her as before & after another fruitless effort to abstract the Placenta I prescribed one grain of Opium to be taken immediately, & left the patient. May 22nd Patient had a good night's rest pulse, good, tongue slightly furred, Placenta had been expelled a few moments before my arrival, ordered Potassæ Nitratis ℥i. Hydrg. Proto Chlorid. pr. xij Ant. et Potass. pr. to be made into six powders and one to be given every three hours. May 23rd - 4th. patient pretty much the same

improving slowly. May 25th. A great change has taken place pulse soft weak, frequent and tremulous, abdomen distended, bowels costive and tongue furred, patient delirious greater part of night before. did not think she would recover ordered Hydrg. Pub. Muriat. pr XII. Pulv. G. Opii pr VI to be made into eight powders and one of these to be given every hour or two, also sinapisms & hot cataplasms to the abdomen. (About this time a Camphene lamp exploded in the hands of her husband which affected her so much as to cause her to leap from the bed this in her then prostrated condition may account for the sudden change in the symptoms.) 6 P.M. Patient about same pain in abdomen slightly relieved. May 26th About same as yesterday. May 27th. Gums tender & all the symptoms ameliorated, from

this time up to the fifth of June the time of her recovery the patient continued to improve. It may be well to remark that the diet throughout consisted principally of flaxseed tea, lemonade, panada, barley water, toast, tea & the usual slops of a sick room. — **Case VI.** May 7th 1860. Was called to see Hester C— Ret 19 unmarried. This patient was robust and of full habit, pelvis well formed. She stated she had been in pain for the last three days, suffered with swelled feet, & that she was eight months advanced in pregnancy. I made a vaginal examination but could discover no signs of labor gave her X grs Pulv. Dover to be taken at bed time. May 9th. Was suddenly sent for at night, found patient in great pain stated that the day before she had a discharge from the Vulva & was fearful that she

was affected with Gonorrhoea. I made an examination & found that the first stage of labor had begun, she continued in this stage suffering the most excruciating pains till 2 Oclock P.M. when the waters having protruded to some extent she seemed easier I now made out the right sacro iliac presentation of the breech. About half past two the waters broke, the breech descending very slowly after waiting some time I gave an ounce of the infusion of Ergot every ten minutes but owing to the Ergot having been pulverized for too long a time it did not act. at four the feet having dropped forth, I brought down the arms which with the exception of the one on the perineum I had little difficulty in doing, then raising the body of the fetus, I carried it forwards, and the head was immediately born. the pres-

-sure on the cord not communic for more than an instant after the birth of the body which was very slow. After waiting some time for the expulsion of the Placenta hemmorhage began to take place to such an extent as to cause the woman to say that she felt something pouring from her. I immediately attempted to extract the Placenta, but failed. I then by grasping the Uterus externally with my right hand succeeded in controlling the hemmorhage to a great extent, but not entirely and as soon as my grasp was relaxed the flooding commenced anew, the patient was unwilling to have me again introduce my hand but deeming it necessary, though not without violent demonstrations on her parts I detatched the Placenta which together with my hand was expelled by the action of the

Uterus. Upon the discharge of the Placenta all hemmorhage ceased. The patient had a rapid recovery, The child was a fine, large boy and tho slightly discolored by the pressure it was subject to, seemed as lively as possible.

Case of poisoning by West India bitters –

June 2nd. Called to see Charles F— Oct 12 years who had been poisoned by drinking too freely of some West India bitters that had been standing for some time. Found patient in a state of torpidity pulse slow, soft, eyes glassy, limbs very flexible. I ordered sinapisms to be applied to his calves ancles & wrists & at the same time administered an emetic which brought up from the stomach about a pint of dark looking fluid, then poured a continuous stream of cold water upon his head this in a few minutes had the effect of rousing him, by this time the sinapisms began

to act & in the course of an hour with the exception of a little remaining weakness he had entirely recovered, after having vomited a large wash basin nearly half full.=

Case IV. Edward D — colored. Oct 19 years. June 8th patient complained of pain in the eyes & brows & nyctalopia, bowels constipated, pulse good, tongue moist. Gave him fifteen grains of Calomel to be taken at once. June 12th, patient complains of stiffness & pain in all his joints, tongue covered with a moist creamy furze slightly red at the edges, pulse frequent, bowels obstinately constipated appetite impaired. He had also drenching night sweats which far from relieving only aggravated the disease by their exhausting effects. With all these symptoms & so well marked too I could not fail to recognise a case of acute rheumatism before me. I gave Potassæ. Bitart.

3p twice a day, this tho relieving partially had so weakening an effect that I was obliged to suspend its use. I then gave a mixture containing Vin. Colchici Rad. ℥ij Tinct Guiaic. Ammon ℥ij Aquae Fontanae ℥vi of this a tablespoonful was to be given even three or four hours. June 14th patient a little better sweats still continue ordered Quinae Sulphatis ℈i every two hours. June 15th About the same as yesterday, continued same treatment. June 16th Patient decidedly better does not sweat so much, joints less painful, tongue cleaner, continued on as before with the addition of a little lemonade which he craved June 17th From this time up to June the twenty ninth he rapidly convalesced. =

Case IV William H — Ot 20 years. July 8th called to see patient whom I found had just recovered from a severe attack of Rheumatism and who had been walking about the city in

his then weak state exposed to the heat of some of the hottest days of Summer. I found this patient with a weak pulse natural tongue & constipated bowels, he was also delirious, not a fierce, but a busy delirium, he would answer when spoken to sharply but almost immediately relapsed moreover he had been taking alcoholic stimulants to strengthen his constitution during his convalescence & had suddenly ceased their use. I gave him Pil Comp. Cath iij at one dose. July 9th Patient very restless tremors have made their appearance, imagines some one to be digging his grave at the foot of the bed, passed a sleepless night, pills did not operate. Gave Pulv. Dover gr. j and a tablespoonful of Brandy every three or four hours. July 10th Bowels still unmoved gave Ol. Ricini ℥ij, slept well last night & greater part of to-day, complains of great pain over his

forehead & in the stomach, ordered cold appli-
-cations to head & sinapisms to abdomen, pulse
& tongue about same as yesterday. July 11th Pa-
-tient passed a sleepless night again trembles like a
leaf all the symptoms aggravated, cannot be spo-
-ken to suddenly as it causes him to start from
his bed, bowels still unmoved, pulse quick and
full, tongue furred. Gave of Calomel gr X v
Pulv. Jalap ℈ß. Pulv. Rad Rhei gr X, also cold ap-
-plications to be continued to the head. July
12th X P.M. Medicine has operated freely and
the patient expresses himself as greatly relieve-
-ed, pulse good, pain still over eyebrows, but
not so great, ordered in addition to former
treatment Potassae Nitratis ℈i Ant et Potass Tart
gr 1 to be made into eight powders and one to
be taken every four hours. July 15th patient
convalescent, pain gone, pulse & tongue good
patient feels weak. The diet in this case

was strictly antiphlogistic as soon as I found that I had a case of Delirium Tremens & Pneumonia combined instead of one of Delirium Tremens alone to deal with. August 9th. I have just seen the above patient & he assures me that he was never better as well as now & if appearances are to be relied upon, judging from his I think that they will bear him out in his assertions. =

Case VII. Michael B— Oct 11 years. July 1st
Called to see this child about 12 o'clock
in the afternoon, & found him suffer-
-ing from severe symptoms of coryza
and also that he had an eruption
upon his skin; His pulse was quick
and full, tongue furred and
bowels very costive. He complains
of the incessant itching, and asked
that something might be done to
relieve it, I ordered Potass Bitart ℥i
Sodæ Bi Carb ℥ß, a teaspoonful to be
taken three times a day. July 2nd.
Patient slept well, otherwise the same,
itching still continues, gave him
a solution of Bi Carb Sodæ to be used
externally to relieve the incessant
itching. July 3rd Eruption has en-
-tirely disappeared child walking

about to all appearances perfectly well 6 P M same day Eruption has again appeared, ordered Pulv. Colocynth Comp. Jr. July 4th Eruption has appeared and disappeared several times during the day, it gave the skin the appearance of being mottled, but upon passing the hand over the surface the characteristic elevation was plainly felt. I thought that as the Magnesia Carb. & Potass Bitart had acted very favorably in similar cases that I would try their virtues again only in a little different manner and dose I gave him Magnesia Carb. Ziij & Potass Bitart Zj and at the same time ordered him to be put into a tepid bath. July 5th. This treatment had the desired effect

the eruption disappearing within twenty four hours, the patient has had no recurring symptoms since I therefore bade him adieu and as it has now been over three weeks & I have heard nothing from him I suppose that he had no further return of the disease.

On

Inaugural Dissertation

on Alcohol

Submitted to the Examination

of the

Provost, Regents & Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

By Charles Lewis

Gentlemen: In obedience to a law of your honoured Institution, though fully feeling the difficulties, and my own incompetency to the task, I propose to lay before your consideration, as a subject of my imposed thesis, Alcohol. A subject in its medicinal and moral relation of utmost importance; an article which I verily believe has done more for the destruction of the human race than any other malady which flesh is heir to a malady which from the world's deluge down to the present time, seems to be the hightful inheritor of man. Yes, since

the time the Patriarch Noah planted a vineyard, and drinking of the wine was made drunk; to the living age, no society has been free from its alluring effects. Youth, manhood and old age all bow to the magic power of riches.

Go where you will - traverse the globe from the pole to the equator - from the equator to the pole - and in every walk of life and every stage of society from the poor peasantry up to richest & most gifted of God's creatures, you will find many who have ~~drank~~ drunk deep into its intoxicating properties and lie under

its baneful influence; and nowhere I am sorry to say, I believe more so than in this free land of America, which unfortunately has its gin shops dispersed with a lavishing hand broadcast over its surface and each and all draw fearful crowds that are always ready, aye, ready for the glass. But to our subject, and here before I enter fully into it, let me tell you that when hereafter I shall speak of its effects that it will be in general and not in any particular or distinct form.

Alcohol is procured by a chemical process called vinous fermentation

by which, at a temperature between 60° and 90° Fahr. with the aid of a nitrogenious material, yeast or ferment, the sugar, contained in certain vegitable juices, is conver=ted into alcohol and carbonic acid, the latter of which escapes by effervescence. The liquid thus obtained is denominated ferment=ed liquor, which by the means of a distillation is converted into brandies, whiskeis &c, called ardent spirits. Now this being subjected to an other distillation or to speak in more familiar terms, having gone through a process, called recti=fication, by which more of the water

is abstracted and also other impuri=ties rectified spirits of alcohol is obtained; not in all its purity, but sufficiently so for medicinal purposes and to the strongest rec=ognised in the officinal code.

But it may be brought to a still greater degree of purity by carrying on the distillation to a greater length.

Pure alcohol is colourless, volatile, and inflammable. It has an agreeable pungent smell acrid and burning to the palate, and compatible in all quanti=ties with water and ether has a specific gravity of 0.794, and its chemical constituents are

four equivalents of carbon, six of Hydrogen and two of oxygen. In its effects upon the System alcohol is a universal stimulant. It stimulates the skin- It stimulates the mucous membrane- It stimulates the circulation- It stimulates digestion nutrition & the secretive functions and I have, I might say in a word the body in toto.

Its immediate effects, when applied in a sufficiently concentrated form, is to induce paleness and more or less pain according to the sensitiveness of the part, which is followed in a short time by a general

expansion of the capillaries, heat redness and sometimes inflamation, and by a continuous application the parts become shrunken and hardened, in consequence as [illegible] suppose of its affinity for moisture, which it abstracts from the parts; or owing perhaps to its property of coagulating albumen ~~and fibrin~~ in the tissues, which property, by experi=ment, it has been proven to possess. When taken internally the first sensible effects of alcohol after the warmth which is felt in the epigastric regions, is a general feeling of exhilaration in all the organs of the body and

particularly that of the mind. There is a great felicity of thought and expression. The imagination is hightened, ~~and~~ The individual displays himself without disguise and converses and acts in an un=covered simplicity of nature. In the young modesty and diffi=dence are for a time discarded. It delusive power steals away the mind from care and anxiety - troubles are dispelled - The eyes sparkles with wit and brilliancy - It inebriates with ineffable delight - The cheer of sun-shine is thrown around him - His soul bounds with exuber=ance joy and in the language

Language of the poet
"It's electric flame
Near it swiftly passes,
As when first the frame
It shoots from brimming glass".
But alas, there is in a short time
~~there is~~ an end to this thrill of
pleasure, and its mighty power
is felt in the general confusion
of his mind and body. He is
therefore faithless begins to
tremble beneath him and in
~~the~~ unassociated action of
their muscles to carry him
tottering on from place to place.
His pure brain, now rendered impure
by the intense excitement of

raised to its height - It pictures its former pleasures into maladies & converts ideal into realities, and a thousand delusions may occur which would carry him to any extent of violence. In this perverted state of mind their passions have nothing to restrain them - their imaginations nothing to check them, and as a consequence their predominant passions reign supreme and latent feelings are betrayed which are by no means creditable. But all are not thus affected. A fondling friendliness and unwonted cheerfulness accompany

frequently ~~with~~ met with conditions in these fevers in which I should have quite despaired of a cure without their aid. Says Dr Wood to whom I am indebted for much of this dissertation and as an acknowledgment of which I now return thanks.

In the debility which often supervenes disease and which not unfrequently constitutes the greatest danger, they are adapted above all other medicines by their universality as a stimulant and energetic property which they possess. In the advance stage of inflamation, when copious suppuration has

its effects in many, whilst others are quarrelsom, domineering and make use, often in the excitement of the moment, of expressions, which lead to the the most absurd follies, deplorable violences and disastrous results. But atlength the disordered functions give way under the excitement, stupor and drowsiness supervene, and the individual sinks in a long and profound sleep; during which a copious perspiration and a general relaxation of the system takes place, and then he awakes, oblivious perhaps of nearly all that has passed during the drunken fit,

with a general feeling of [illegible] guor
and depression and a most disagree
=ble and giddy headache ever
reminding him of his degrada
=tion.
And now should he stop here, under
the influence of proper attention
~~and~~ exercise and rest a few
days will probably find him
as well as ever. But this perhaps
is not all. And unfortunately what
I have just been describing is but
a repetition of many such a
revel and
'Bacchus that first from out the purple grape,
crushed the sweet poison of the misused wine,'
has been bowed to and called

on in hymns divine by this his pati=
=able votary; and the penalty of inordi=
=nate indulgence has come on.
The system demands its wonted
stimulus, and the unfortunate
victim, unable to resist his goading
desire, succumbs to the pernicious
habit; not for this one time alone,
but too often for ever after; and
not in the smaller potations which
he had previously indulged
out ever and anon he drinks
down wet damnation in bigger
floods of the blushing tide; whilst
he stands upon the verge of distruc=
=tion, with the curtains of the invisi=
=ble world wavering by every wind

before him; but he heeds it not; and he is borne on and up by the brightning bumbers like the unhelmed ship that sports unwieldy round on the backs of the foaming waves to a slow perhaps, but to an inevitable destruction.

The poisonous effects of alcohol may be divided into two stages, that of the acute, and that of the chronic stage. Instances of the former, that is of ~~the~~ acute poisoning are rare, I believe, though now and then by the imbibition of very large draughts, the nervous system is completely overwhelmed, and the unfortunate individual

fall into a sleep that knows no waking. Apoplexy is sometimes brought on in persons predisposed to that affection by determining the blood in undue quantities to the brain and thereby cause death. Meningitis may exist alone, but this is said to be more often to accrue from several days or weeks from the hard drinking. In the chronic stage of the poison a multiplicity of evils arise. It predisposes the system to inflamation, especially in the earlier stages of its habitual use by inducing a nervous condition and secondly by accelerating the

circulation; and thereby acting as an exciting cause to a predispo=sition already existing. With rich food as an adjunct it contributes to the developement of ~~gout~~ gout. Another of the evils arising from the abuse of alcohol is the production of inflamation in the organs upon which ~~the~~ its stimulating effects are most strongly exerted, such as the stomach, brain &c. Fatty degeneration of the liver is also one of the very common sequences of intemperance, depending upon the depraved condition of the cell-action, whereby fat is produced, instead of the normal secretion. From the

constant stimulation of the whole system, the excitability is so far exhausted as to bring about on the withdrawal of its usual stimulus a condition of extreme prostration which we recognise under the name of "delirium tremens" or "mania a potu". The characteristic phenomena of which are too well known to require any description of, at any hands, or in this place. Suffice it to say that it is a real depression of the cerebral centres and is relieved by restoring the stimulant impression and ~~thus~~ quieting the the nerves by the means of alcohol & opium.

But though this attack is relieved it is often only for a short time unfortunately for what I would call at this stage degradation, the sot. It has been said by a great man "that men take a pleasure in ruin"; and truely, do I believe it. Nero you know set Rome on fire to enjoy the spectacle of a vast conflagration, through cruelty and pleasure and man, for a few pleasurable and fleeting moments, consumes his soul ~~on fire~~ under the influ=ences of the treacherously hidden fire of alcohol. But as I was about to say he is, in a short time, ex=posed again to its charms, and

following out his natural inclina-
-tion for ruin, falls a mournful
wretch ~~to~~ within its giant's arms.
It also induces that most
harassing and troublesome
disease known by the name of
dyspepsia.
An other evil of the abuse of
alcohol is the general impair-
-ment of the constitution, thereby
rendering the system less
able to resist the danger of
disease and also by invalidat-
-ing its therapeutic effects in
cases in which they would produce
~~be~~ ~~of~~ most beneficial results had
~~their~~ not its stimulating

effect been rendered inert by
its continual dead destructive
abuse.
I now ask gentlemen to the
therapeutical effects of this agent
which I propose to allude to
but briefly, and then conclude
what I have to say on this
subject. And first it may be
asked how far the use of
alcohol in health has been use-
ful? I answer, it I may judge
from my own experience, and
from the world records down
to the present time, never.
Indeed I believe, that many,
not in the profession of a peculiar

Sanguine or nervous temperament, may drink moderately with impunity. But these effects do not properly come under the head of Therapeutics: so I will proceede to these.

Alcohol is a very valuable agent in scrofulous or tuberculous diathesis. "Nature," says one of the stars of our profession, "while planting in so large a proportion of the human family a disposition to scrofulous or tuberculous complaints seems to have provided, in the fermented liquors which if properly used, may be considered as in some degree a counteracting agent.

Physicians have often noticed that drunkards seldom die of Phthisis. In this respects, says this gentleman, my own observations coincides with that of others. During my tour of hospital duty in the winter, I meet with great numbers both of drunkards and tuberculous individuals; but it is very seldom that the two classes coincides. This is a singular fact and not exactly in what might have been expected, and tho the discovery of this apparent truth has been something like a surprise to the profession. Why these effects surprised the profession I can

cannot readily conceive; since we know that tuberculous consti=tution gives a tendency to the degeneration of tissue. Now Carbon and Hydrogen, which abounds so plentifully in alcohol prevents the disintegration of tissue and hence it is nothing more than what might have been anticipated that it would be ~~of~~ a valuable agent in this disease. Moreover ~~in Phthisis~~, it stimulates the digestive apparatus which is generally much impaired in Phthisis without which the proper elimination of substances ~~are greatly and~~ cannot be carried on; and Carbon &

and Hydrogen which the system requires is not produced. Now in alcohol these ~~elements~~ substances already exist and necessarily no digestion is essential for their proper elimination; but being already in that form are immediately taken up in the useful purposes ~~of~~ in the economy of the system. The large quantity of oil which is present in alcohol may also exert some beneficial effects upon this disease, similar to that exercised by cod-liver oil. ~~is~~.

"In low febrile diseases the alcoholic liquors are a most valuable resource, and indeed, often indispensable. At least I have very

taken place and the patient is sinking under its effects alcohol is a most valuable servant coming in to render assistance to the flag-ging system and supporting it until the exhausting drainage has ceased. It is also highly recom-mended in the suppurative stage of pneumonia to prolong life and palliate sufferings and it seems to me that I have often seen the most decided effects in the extreme debility attendant the second stage. It is also spoken of by some as a valuable agent in sustaining the exceeding prostra-tion of the vital properties which follow the

the bite of that venimous reptile.
the rattle snake. But this seems
as yet to be a matter sub judice.
A cure of many cases of the bites
of these animals have been attribu
=ted to the use of alcoholic stimulants
in large doses; but so many instan
=cies are on record in which the spon
=taneous cure of the bites have taken
place after the exhibition of alarming
symptoms; and in so many instances
these symptoms being only imaginary
ones, that is almost impossible to say
whether, in a case of relief, it was due
to the alcohol or that it was a spora
=dic cure. And finally alcoholic
stimulation may be use in almost

any case of extreme debility, when life and death seems to be balanced equally on the scales of nature. and you want a "little more life" to ~~bring~~ weigh it down or to sooth the doomed sufferer to the "city of the dead". And here Gentlemen I shall close this crude and imperfectly written dissertation, and much, I have no doubt, to the satisfaction of him whose duty or curiosity has lead him to follow me so far; and if one has done it, let me assure him that he has my warmest sympathy for the patient ~~which he has manifested~~ sufferings which he must have endured and be

it known to him that my opinion of this liquid, upon which from generation to generation many, aye many a noble spirit hath been wrecked - the peace, happiness and prosperity of many a once loving family destroyed - and on the other hand ~~the~~ an agent by which the icy hand of death has been stem warded off, be it known I say to him that my opinion of this liquid is, that it is a medicinal agent; and that in many others it is powerful for good or evil - a poison, or a medicine according to the treatment it recieves in the hands of those in whom it is placed.

An
Inaugural Dissertation
On
Scarlet Fever

Submitted to the examination
Of the
Provost, Regents, and Faculty of Physic
Of the
University of Maryland
For the
Degree of Doctor of Medicine

By
Alex G Edwards

This is an eruptive or exanthematous fever, characterized by a febrile excitement, a specific eruption upon the skin and an inflamation of the fauces, in some cases amounting to ulceration —

Writers for convenience of description have deemed it expedient to divide the disease into three forms, viz. Scarlatina simplex in which there is a florid rash with little or no affection of the throat; Scarlatina anginosa in which both the skin and the throat are decidedly implicated; and Scarlatina maligna in which the attack of the disease falls on the throat — It is one of the most prominent diseases of the exanthematous variety and is manifestly capable of

being propagated by contagion;
and the individual on whom
it has occurred, is, as a general
rule, ever afterwards sheltered
from its recurrence. It occurs
in every locality and at all seasons
of the year, and hence is common-
a disease of childhood; though
persons of all ages, however, are
who have passed through that
period, without being attacked,
are by no means exempt from
it.

The most distinctive symptom
is the scarlet rash, which makes
its appearance usually on the
second day after the fever.
It sometimes makes its appearance
earlier or later, and occasionally
at the very commencement of
the attack, coming out first
upon the face, then successively

on the neck, trunk and extremities, spreading finally over the mouth, fauces and nostrils, occupying about twenty-four hours in its diffusion. In the beginning it is in minute red points, which rapidly form in broad patches, and in the course of a few hours generally form a diffe continuous scarlet blush over a large portion of the surface. But great diversity exists both in different cases, both in the amount and arrangement of the eruption. Sometimes it is very slight, presenting only a few points of moderate extent, and so mild as scarcely to amount to disease; whilst in the majority of instances, it is diffused over the whole surface, or exhibiting this uniformity

in certain parts, and in others only in patches - The eruptions are more intense in the armpits, flexures of the joints, bends of the knees and elbows; disappear upon pressure and returning when it is removed - The rash is in no degree elevated, but is often accompanied with a perceptible roughness of the skin which is most evident upon the extremities, and front of the body, giving sensation as if the surface was covered with gravel - This is caused by an enlargement of the cutaneous papillae - The fever does not abate after the appearance of the eruption (therefore different in this particular from small pox) but continues with various degrees of violence - The pulse

are generally very quick amounting in some severe cases to one hundred and thirty in a minute. The skin is dry and sometimes intensely hot. The temperature as indicated by the thermometer being not unfrequently as high as 106°. The fever has exacerbations sometimes towards evening, and is occasionally attended with delirium, in some more severe cases comatose symptoms supervene. The bowels are generally constipated, but in the advanced stages of very severe cases diarrhoea occurs.

Scarlet-fever is sometimes confounded with measles, but a careful observation is only necessary to distinguish them they differing in several particulars viz. 1st An attack of measles

is ushered in by catharral symptoms, sneezing, cough, and defluxion from the eyes and nose; which are not present in scarlet fever, at least in the first stage of the disease —

2nd It may be distinguished by the inflamation and ulceration of the fauces, which does not occur in measles —

3d There is a point of difference in the eruption it self in measles it is dark and elevated, and presents somewhat the tint of the raspberry — whilst in scarlet fever the surface is smooth and resembles the colour of a boiled lobster —

4th In this disease the papulae are generally diffused; in measles, collected into clusters of a horse shoe shape, leaving interstices of

healthy skin —
5th There is an important difference in the period of the appearance of the rash after the introductory fever, which usually is about the second day in this disease, in measles, the fourth —
6th In the most regular and favourable cases of Scarlet fever there is desquamation of the cuticle, in large flakes on the lower extremities, the scarf skin of the feet and hands separating almost entire, whilst in measles it is in minute scales —
Having thus given a general history of this disease and pointed out some of its differences from measles, with which it is only likely to be confounded, will now proceed and take up each of the forms into which it has

been divided consecutively—
Scarlatina simplex — This variety
of it very mild — In some cases
the patient is not even confined to bed — But in other more
severe cases, the eruption is preceded by a sense of weakness
and general uneasiness, nausea
and transient chilly or shivering
fits, speedily followed by heat of
surface and a considerable degree
of thirst — Headache, inclination to
vomit — or actual vomiting, drowsiness and other indications of affection of the nervous system,
are occasionally experienced in
addition — The first eruptions
which come out at any hour
in the day, commonly increase
in severity towards evening and
during the night — On the second
day from the attack of the disease

which corresponds with the fifth or sixth of the infection, the face becomes swelled; small spots not prominent; by no means of a very bright red at first, but subsequently of the most vivid hue, separated by intervals of the skin preserving its natural colour, appear in great numbers on the face, the neck, and the breast. Within twenty four hours an eruption of the same kind is thrown out over the whole body, tongue, palate, and pharynx. On the third day the greater number of the intervals which have been mentioned as left between the small spots of the eruption, have disappeared, and are replaced by large dotted patches, or a diffused red blush. The skin which is much hotter on this than any other of

the exanthematous disease, is now burning, itchy, parched, and tender to the touch with quick pulse — The surface generally smooth, is in some places rough like the skin of a goose (cutis anserina) a peculiarity especially remarkable about the outer hand parts of the arms and thighs; the hands and feet; where the redness is commonly intense, and swelled, stiff and painful —

On the fifth and at latest — on the fifth day, the eruption of Scarlet fever generally begins to grow pale — the redness leaves the parts affected in the same order in which it appeared — the puffing of the face diminishes — the intestines which separate the palms become larger, and the colour of the latter fades —

By the seventh day the characters of the exanthem are already far from distinct — From the fifth day, slight desquamation takes place from the face, temples, neck, and chest — On the eighth and ninth, large pieces of cuticle are detached, that of the hands sometimes coming off in the shape of a glove —

Before the eruption, and on its first breaking out, the pulse is full and frequent — The surface of the tongue is covered with a whitish fur, and its edges are red — The tonsils are little swollen — sometimes the eyes are inflated, sparkling, humid — The sleep is disturbed and broken by dreams — These symptoms present a marked remission on the fourth day after the eruption

when the tongue commences
throws off its coating, when its
surface appears of the brightest
red - At this period Scarlet-
fever of a favourable kind,
sometimes exhibits a rather
remarkable phenomenon.
After a febrile paroxysm, the
skin is covered a new with
red spots, less numerous and
of smaller size than those of the
first eruption - This renewal
of the disease does not continue
long, and is terminated by
a more or less copious perspi-
ration —
Scarlatina anginosa - The pre-
liminary symptoms are more
violent in this form of the disease
than in the last - A sudden
sense of stiffness in the muscles
of the neck and lower part of the

ushers in the attack - On the
second day the fauces are in-
flamed, the voice is hoarse,
deglutition is difficult and
painful - the lining membrane
of the mouth and fauces are
of the same bright red ~~xxx~~ as
the general integuments -
Some days, and often on the
day of attack, the anterior pillars
of the velum palati, the tonsils,
and fauces become covered
with a thick viscid fluid, or
with a gray or yellowish white
matter which resembles that
which is observed in certain
cases of cynanche tonsillaris -
These exudations of various
colour and consistence, often
form a kind of uniform coat-
ing over the fauces - they differ
from patches of coagulable lymph

by being softer - Formerly, they were thought to be always the seat of ulcers, or gangrenous portions of mucous membrane - but when removed they leave the surface for the most part merely inflamed, and without organic change

The pultaceous or curdy concretions are removed from day to day - they often spread over the lateral parts of the pharynx and extend even into the oesophagus - Occasionally they extend into the larynx, producing symptoms of pseudo membranous croup; but this is very rare - Along with this inferior disease, there is almost always more or less swelling of the external parts, in the region of the parotid

and submaxillary glands and sometimes the tumefaction is very great. The patient is often troubled with an offensive viscid mucous secretion in the fauces which he cannot swallow and finds it difficult to discharge from the mouth. The lips are often cracked. Not unfrequently the mucous membrane of the nostrils partakes of the disease; the nasal passages are closed by the consequent swelling, and the crusts which form upon them confine; and the patient is compelled to breathe exclusively through the mouth producing dryness of the tongue and lips. At a more advanced stage a yellow and exceedingly offensive liquid is occasionly discharged from the nostrils, which is sometimes very acrid and excoriates the orifice. A similar

deration from the fauces is swallowed and probably conduces to the diarrhoea which is sometimes present in the latter stages of the disease.

The eruption does not appear as soon as in Scarlatina simplex; it is often not visible before the third day, and does not spread so constantly over the whole surface of the body. It consists of isolated patches of a scarlet colour situated over the back, the flanks, the neck, the breast, and the limbs and very regularly about the wrists.

In this variety the inflamation of the skin is very commonly attended with a decided tumefaction of the cellular tissue, especially in the face, and in the fingers, the flexion and extension of which is very much impeded. Lastly the entire duration

of the efflorescence is longer in this form than in Scarlet-fever simplex, and the subsequent desquamation less regularly performed -

Scarlatina anginosa may be complicated with pneumonia or an affection of the brain, and thus become fatal - Secondary diseases are also more frequent after this form, than after Scarlatina simplex -

Scarlatina maligna - Scalatina maligna occurs with symptoms of still more formidable description - It commences like Scarlatina anginosa, but in the space of two or three days is characterized by symptoms of extreme severity - To a violent shuddering fit succeeds a burning fever, thirst, headache, quick and

hard pulse, heat and pain of
throat; vomiting and diarrhoea,
coma or delirium, followed,
three or four days after, by patches
of eruption more raised than
in scalatina simplex, and
sometimes accompanied with
blood in the urine and excre-
ments. The efflorescence is tardy
in the variety in its appearance;
its colour is pale or livid; it
may appear and disappear
more and again. The pulse
is small and irregular; the
teeth and tongue are covered
with black or brown sordes; the
eyes are watery and much in-
jected; a fetid discharge is
sometimes found out from
the nostrils; the cheeks are of a
dusky colour; there is at the
same time deafness, in adults

delirium, in children coma
and jactitation; the breath is
tainted, the breathing noisy and
laborious, owing to the thick
and ~~so~~ viscid mucus adhering
to the parts about the fauces; deg-
lutition is difficult or impossible;
there is constriction of the jaws,
and a blackish exudation from
the tonsils and neighbouring parts.

Disappearance and reappearance
of the eruption, continual coma,
urinary difficulty of respiration,
and copious diarrhœa, are in di-
cations of great danger.

The few patients who survive
these formidable symptoms, or
too early an exposure, are apt
to be attacked by a secondary class
of diseases, such as chronic
inflammation of the bowels, cough,
effusion of pus or serum into

the joints, anasarca &c

Among the most common is anasarca, which attacks during convalescence, about the fourteenth or fifteenth day of the disease, occasionally, later. Its approach is announced by a feeling of languor, depression of spirits and perversion of sleep and scanty high colored urine, which holds in solution albumen. It should always be tested when dropsy is suspected. The treatment in this disease must be prompt and active.

Scalatina sine exanthemate. This is a mild form of scarlet fever, and generally attacks adults. There is sore throat with little or no eruption, but is followed by slight desquamation

Treatment = In Scarlatina simplex of a slight kind, drugs are scarcely ever required. The patient should be kept in a room of agreeable and uniform temperature. The diet should be very simple; such as boiled milk rice &c; if the bowels are disposed to be sluggish, a mild aperient is required.

In Scarlatina anginosa, gargling frequently with water and milk or some mucilaginous decoction, the application of emollient poultices, in the form of a cravat, to the the throat, and diluted sinapisms to the extreme parts, are generally useful.

A gentle emetic at the onset of the disease has been found beneficial in modifying its future course. It therefore should

be given when the patient is seen in the first stage; though it may have been unnecessary yet it can do no harm, and it is impossible to know the character of the case. Ipecacuanha or a mixture of this with tartar emetic may be used. After an emetic unless the case is very mild, a cathartic should be given, calomel for instance, and if it does not operate in twenty eight hours should be followed by a dose of castor oil, magnesia, or some saline laxative. After this the bowels should be kept open and if there is much excitement cathartics of a depletory character such as sulphate of magnesia should be given. If there is acidity of the stomach magnesia

should be given; where there is nausea and vomiting, the Seidlitz powder, and where the system is to feeble to admit of watery purgation, rhubarb.
In cases where the skin is universally and disagreeably hot and the patient experiences no sense chilliness, cold applied to the surface is highly useful. Cold internaly is also beneficial when the fever is well developed. The patient should be allowed to drink small quantities of cold water frequently and hold ice in his mouth. Diaphoretics should also be given such as the mixture, of the solution of acetate of amonia, citrate of amonia or muriate of amonia; if nervous symptoms should supervene

sweet spirit of nitre, Hoffman's
anodyne or camphor water
should be given in addition
to the diaphoretic. If the tissue
is very scanty mild diuretics
may be resorted to, such as nitre
spirit, bitartrate potassa &c.
If delirium comes on, the
head should be shaved, cold
applied to it; leeches should also
be applied to the throat rather
than the temples; for the tonsils
in such a case are more
or less inflamed, and probably a part of the head affection
may arise from the disturbance
of the balance of the cerebral cir-
culation, produced by the tumefaction around the great veins
that return the blood from the
head. By leeching the throat
you relieve that, and the head also,

Symptoms of debility sometimes occur in Scarlatina maligna and the practitioner should always be prepared to counteract them. The patient sinks often at a very early period, with but little affection of the throat or skin; and the only way such a patient can be saved if at all, is by the early administration of tonics, such as wine and bark. Danger also arises from the gangrenous ulceration of the fauces; this is also treated by wine or quinia, diligently but cautiously given. Something should also be done by way of gargles to correct the state of the throat. A weak solution of the chloride of Soda may be employed. In children who are unable to gargle, the solution may be

injected into the nostrils and
against the fauces by a ~~syringe~~
syringe—
Chlorate of potassa in a drachm
to a pint of water has been found
very beneficial, under the use of
a ~~drachm~~ pint to a pint and
a half per day—
The Chlorine mixture is also found
to have been good; this consists
of two drachms of chlorate potass dis-
solved in two ounces hydrochloric acid,
previously diluted with two ounces
distilled water. The solution must be
put into a stopped bottle and kept
in a dark place. Two drachms
of this solution, mixed with a pint
of water constitutes the Chlorine
mixture. Dose from tablespoonful
to two according to age of patient
frequently—
If there is any indication

of inflamatory disease within we must adopt more active treatment = we must not regard the depressing influence of the poison, but ~~as~~ make use of blood letting, purgative medicines and mercury, in order to promote the arrest of the inflamation, or the absorption of the effused fluid - Blood letting unless in these very extreme cases should not be resorted to, for it should be borne in mind that the tendency of the system is usually to the asthenic state; that the cause is probably in general depressing in its nature, though capable of rousing the energies of the system, in many cases to active ~~cos~~ resistance - Dr R Williams has bestowed great

attention to this point and has concluded that the chances of recovery are diminished by the practice of bleeding, in ratio of four to one, as compared to those who have not been bled."—

Preventive treatment — Undoubtedly the best is ~~to give~~ keep the patient away from those who are afflicted with the disease — Hahnemann claims for belladonna the power of a prophylactic, but it has been discovered ~~from~~ by experience that it is a humbug as well as all the rest of his suggestions—

Thesis

Clinical Report of Cases

Submitted to the Examination

of the

Provost, Regents & Faculty of Physic

of the

University of Maryland

for

The Degree of Doctor of Medicine

by

Ferdinand E. Chatard Jr.

of

Baltimore

Case 1st

-Acute Renal Dropsy-

William Butler, negro farmhand, age 36 years, entered the Baltimore Infirmary on the 5th of April 1860. He gave the following account of himself, and being an intelligent man, the account is no doubt correct. About the 18th of last December, while attending to some farm work he was exposed for considerable time to rain and dampness The next day he felt unwell and in the course of forty-eight hours he noticed some puffiness about the eyelids and face, and then followed enlargement of the abdomen. On the 24th of December, though still unwell, he was obliged to assist in making a grave The ground was very damp and more or less water formed in the grave when they they had reached the depth of a few feet. That night he was taken with a severe chill

and the next morning found himself more
swelled than before. His scrotum also became
considerably distended. He does not remember
to have been affected with drowsiness, was
free from pain and thirst & that he passed
during all this time his usual amount of
urine. He was treated during this attack
by a Physician of the neighbourhood. I was
unable to learn the remedies employed
but the effects of them were marked as in
a few days the oedema was removed.
On the 8th of January he assisted in cutting
ice and was thus much exposed to cold and
wet. The next day the oedema was almost
as marked as it had been any time during
the previous attack. He, however, did not
yield but continued his usual work for
nearly two weeks: then the swelling was
so great that he could scarcely walk.
He was at times affected with drowsiness

Failing to improve under the various treatments employed by the medical gentlemen of the part of the state in which he lived, he was sent to the Infirmary. When first seen by me he presented all the symptoms of a well marked case of dropsy. Edema general and very well marked. Urine of a smoky hue Specific Gravity 1010- rather less in quantity than normal, and yielded a most abundant precipitate of albumen with Nitric acid and heat. Heart sounds natural, pulse regular. appetite pretty good. Almost constant desire to sleep. He was ordered the following remedies by Dr Chew:: a pill containing Pill. Hydrarg. gr ij Pulv. Scillæ grj. Pulv. Digitalis grj to be given 4 times a day and ales a wine= glassful of Infus. Scoparii three times a day. Friday April 6th. He says that he feels he is improving since he entered the house Passed since yesterday ℥xxv @ ℥xxx of

smokey urine. Sp. G 1018. Albumen still most abundant under the action of heat and Nitric Acid. Upon standing the urine deposits some mucus and a large number of beautiful crystals of Neutral Triple Phosphate. Once or twice I think I found something resembling the Renal tube cast. being imperfect and irregular certainly as that score could not be obtained

Saturday 7th Found his urine to day more natural in color, the smoky appearance not so well marked as before. The amount passed O.V. Sp. G. 1014. Crystals of Triple phosphate still numerous. could not find anything resembling a tube cast. Is much troubled with drowsiness but says he feels better and is not so much swelled. Continue the same treatment

Sunday 8th. Passed since yesterday only Oij of cloudy urine. Sp. G. 1012. Albumen

still very abundant. did not have time to examine the deposite microscopically. There seems to be more fluid in the abdominal cavity. This no doubt has some connection with the diminished amount of urine during the last 24 hours. Still drowsy. Continue pills and infusion of Scopavium

Monday 9th Amount of Urine ℥xxxv. Sp. G. 1013. - highly albuminous. Abdomen less distended and he can walk with less difficulty. complains of headache and says it has lasted for some days - sleeps very frequently during the day.

Tuesday 10th Passed since yesterday ℥xix. of smokey urine Sp. G. 1014. No further diminution of the ascites. Drowsiness still very troublesome. no headache to day but says that he troubled with cold feet has never been troubled in this way before the present attack of dropsy. Dr. Chew

ordered for him, in addition to the other remedies, the following solution

℞ Potass Bi Tart ℥j. Magnesiæ Sulph. ℥ß.
Aquæ ƒ ℥vij. Syrup. Simp. ƒ ℥j. Fiat. Solutio
S. Take ƒ ℥j every 2ª or 3ª hour until it operates freely.

Wednesday. 11th Since yesterday, under the influence of the above purgative solution, his bowels have been opened 3 or 4 times & he feels much better and the ascites has perceptibly diminished. Passed ƒ ℥xxxv. of urine Sp. G 1014 more natural in color but still highly albuminous. Examined some of the deposite under the microscope and found numerous beautiful crystals of triple phosphate. two or 3 pieces of tube casts and a few fat oil globules. Continue the same treatment.

Thursday 12th. Bowels have been moved 5 or 6 times since yesterday morning. Ascites

less than at last visit. He tells me he has not felt so well for several days. Has passed during the last twenty four hours ℥xxvij of urine Sp. G. 1010: highly albuminous and depositing on standing an abundant crop of phosphate crystals. The solution of Pot. Bitart & Mag. Sulph. is to be stopped for the present.

Friday 13th. Passed about ℥xxvj of albuminous urine. Sp. G. 1012. Rests very well at night yet is very drowsy and sleeps frequently during the day. The bowels not having been opened since the saline solution was stopped. Dr. Chew ordered it to be resumed. The pills of Vil. Hydrarg., Vulv. Scillæ, & Vulv. Digitalis are to be stopped and he is to have Syrupus Ferri Iodidi gtt xx after each meal. Continue Infus. Scoparii

Saturday 14th. During the last 24

hours he has had three operations on his bowels. Feels better and thinks the swelling is considerably less than it was three days ago. He forgot to save his urine. To continue the saline solution.

Sunday 15th. Bowels have been opened four times. operations large and loose. Passed during last 24 hours the large amount of f℥lxx. of albuminous urine Sp. G. 1008. To continue Syrup of Iodide of Iron and Infusion of Scoparia, want saline solution for a few days. Says he is certainly better.

Monday 16th. Found him this morning very much improved in every respect. Drowsiness not so constant. Bowels have been moved 3 or 4 times. stools loose and serous. Passed nearly f℥c of urine Sp. G. 1010 Still highly albuminous but not to the same extent as before. Continue same treatment.

Tuesday 17th I did not measure his urine today but should judge it to be fully as much as before. about ℥vc. Says he feels himself improving rapidly.

Wednesday 18th Bowels have been moved three times during the last twenty four hours. The evacuations were serous. He also passed in the same time ℥lxxxviij of urine Sp. G. 1009. containing much albumen though not by any means as much as when he first came in. he is but little troubled with drowsiness at present. Discontinue the saline solution for a day or two.-

This patient continued to improve rapidly after this date. The use of the saline solution seems to have been of more benefit to him than any other remedy which was tried. The diminution in the amount of albumen every day was quite perceptible. When he left the house his urine was perfectly normal

not a trace of albumen could be discovered.
And during the last two weeks of his stay
in the Infirmary he was entirely free
from every trace of ailment. The fact of
his not having returned to our institution
during the last eight months will
leave little doubt as to his perfect recovery

Case 11

Fistulous opening into mouth.

David Wilson, a colored boy aged 14. was admitted into the Infirmary April 15th 1860 for the cure of a cervical fistula; the external opening of which was situated just over the cricoid cartilage. In all other respects he was perfectly healthy and strong. Upon examination we found what seemed to be a stiff cord situated immediately beneath the skin, of a cartilaginous hardness, and extending from the cricoid cartilage to the hyoid bone. It was sufficiently movable to allow of its perfect isolation from the surrounding parts. Upon introducing a probe of small size into the external opening and moving it gently upwards we were able to pass it the entire length of this cord-like substance. There was generally at the external opening a drop of a

substance resembling mucus: the probe when
withdrawn was found encrusted with same
Dr. Farnandis, under whose charge the
patient came, informed us that it was
either a direct fistula from the base of
the tongue, or the result of chronic inflamation
of the Thyro-Hyoideans bursa and that an
injection would settle the point. He then
ordered the following injection to be used.
Tinct. Iodinii comp. ℥j. Aqua Font ℥iv. as
it would serve the double purpose of exciting
adhesive inflamation and deciding a point
of diagnosis. As soon as the injection was
thrown up in sufficient quantity to distend
the canal the boy spit it from his mouth.
This simple injection seems to have been
all that was required to effect a perfect
cure as from the time of the first injection
the discharge ceased and the canal closed
His case which before this had been

somewhat affected, also improved. He left the house May 11th perfectly cured with the exception of some remains of the cartilaginous cylinder. For the removal of this he was ordered to use the following ointment: ℞. Plumbi Iodidi gr v. Cerat. simp ℥j applying it locally 3 times a day.

Case III

Diabetes Insipidus.

David Barker. Negro farm hand age 35 years, was admitted into the Infirmary for the treatment of the above disease I obtained from him the following account of his case. He has been often attacked with chills & fever from the fact of his living in a malarious district He also had, about three months before he entered the house, an attack of pleurisy About four weeks after last Christmas

he took a fresh cold and had an attack of intermittent fever which was followed by a pain in the small of the back he then noticed for the first time that he was passing an increased amount of urine a loss of appetite and a rapid wasting of the body followed almost immediately According to his own account he must have passed from five to six quarts of urine during the twenty four hours When he entered the house he presented nearly all the symptoms of a person suffering from Diabetes Mellitus, the Specific Gravity and Chemical reactions excepted.- The Sp. G. was at that time 1005. His bowels were very much constipated. He was ordered Infus. Uvae Ursi ℥ij 8 times daily. also Tinct. Ferri Chloridi gtt xv before each meal: good diet. A regular account of the amount of urine

passed was kept but according to his own account the daily diminution was quite perceptible. He gained flesh and strength rapidly, so much so that in the course of three weeks he was as well as ever. He left the house perfectly cured on the 15th of April. The average amount of urine passed by him during twenty four hours was, for the last four days of his stay in the Infirmary, about Oiij. The Specific Gravity of it was slightly below the normal standard.

Case IV

Fistulous opening into the Abdomen

Isabella, negro house servant aged 18. was admitted into the Infirmary March 26th 1860 for the cure of a fistulous opening which was situated in the median line about one inch below the umbilicus. The following is the history of her case. About four months

before the time of her entrance into our institution she gave birth to a fine child. About four weeks after she first observed an tubular [illegible] in the umbilical region, at the same time she suffered much with sharp lancinating pain in the region of enlargement. In about two months it attained the size of four inches in diameter and was then lanced by a physician who was attending her, a quantity of foetid pus was discharged, but all attempts to close the opening made by the lancet failed in consequence of constant discharging of a similar purulent matter, together with bubbles of foetid gas whenever pressure was made on the tumor. When she entered the house the diameter of tumor was still about four inches, it [illegible] of a semicartilaginous consistence and extended deep down into the abdominal cavity. The discharge was constant and had a decided fæcal

odor. bubbles of gas having likewise a fecal
smell were given off whenever pressure was
employed. She states that since the opening
was made she has not suffered with those
excruciating pain which were before so
troublesome. Her general health has
been good at all times her bowels have
been regular and she has had no disturb-
ance of her catamenial functions
She was ordered the following treatment.
Potassii Iodidum gr v 3 times a day.
Good diet and a blister to be applied
to the umbilical region.

Case V

Pus in urinary secretion.

Ann Maria Carr, Negro cook aged 28 Entered the Infirmary August 4th 1860. The following account of her case was given by her. and is reliable as she was an intelligent negress and always gave exactly the same account. About the 1st of last March she was attacked with pain in her back about the region of the left kidney. The pain was sometimes dull at other times sharp and lancinating. She had received no blow in that region of the body, her health had always been good notwithstanding she has been very much exposed to cold and dampness.

The pain remained for sometime stationary and then, to use her own words, it went down her left thigh, in which part the pain was always dull and never of the sharp kind. It

then returned from the thigh and settled in the region of the bladder. She did not give up her work though she found the pain was much increased whenever she made any extra exertion

Some after the commencement of the pain she noticed that her urine was very high colored: it remained in this state for some weeks and then became of a creamy consistence and appearance when first passed but upon standing it separated into two portions a thick white sediment and a somewhat turbid supernatant fluid. About the time when she first passed this creamy urine, she noticed on her stools several flakes of a whitish substance resembling soft fat: this was only noticed on two or three occasions. Her bowels at this time were a little loose. She did not experience the sensation

of any thing giving way at the time of
passing these flukes. The presence of this
substance in the stools was only noticed
twice before she entered the house. Accor-
ding to her own account not more than
a tablespoonful was passed either time.
As a general rule her bowels have been
costive and she has frequently found it
necessary to take purgative medicine
The passage of urine has frequently
given rise to burning pain. She was
treated by her physician with Sulphate
of Quinine and Blue Mass for quite
a long time but without any marked
improvement. When she entered the
house she presented the following symptoms
tongue furred, thick and fissured. Pulse
regular but a little quick. Appetite very
bad and is frequently affected with nausea
and vomiting. suffers from excessive

thick and is handly ever free from pain either in the region of the kidney or bladder. Her urine is of a milky white color when freshly passed. Specific Gravity 1010. After standing for a few hours it separated into a thick white sediment below and limpid fluid above. Upon applying the tests for pus to the sediment the reaction was very well marked. The microscope showed the sediment to be composed entirely of pus globules. I was never able to find any crystals in the sediment though I searched for them carefully. The amount of sediment (pus) when the first urine is accumulated to one eighth of the urine passed I was unable to make full examinations during the first four days of his stay in the house so my daily account commences on the 5th day of August

Monday Aug 9th During the last twenty

hours she passed her average amount of urine about f℥xxx. not being all saved I am not perfectly certain with regard to the amount. The portion which I obtained presented the following characteristics Slightly acid. Sp. G. 1010. Somewhat turbid with pus Reaction of pus well marked. She was ordered Infus. Diosmæ f℥j three times a day.

Wednesday 8th Amount passed since yesterday f℥xxx of turbid ammoniacal urine having an acid reaction and a specific gravity 1005 Pus about f℥v one fifth of the whole amount passed. Tongue foul appetite not good. Says she feels a little better. She is to have Ac. sulph. dilut. gtt xx three times a day. Continue Infus. Diosmæ

Thursday 9th Passed f℥xxx of the same kind of urine. Slightly acid. Sp. G. 1007. Amount of pus still ⅕ of the whole. The smell was

decidedly ammoniacal and after standing for a few hours the acid reaction was lost and replaced by an alkaline one. Her bowels have been moved twice since yesterday morning. She complains of being very weak. Her tongue still remains furred and swollen. She was ordered as much beef-tea and milk she could take.

Friday 16th/11 The urine amounted to fʒ xxxix. of a dirty white appearance and strong odour. Acid reaction more marked than before. Sp. G 1010. The quantity of fæces is somewhat less than yesterday being only ½ of the whole. She seems to be a little better and she feels stronger than she did yesterday. Pulse pretty good. Appetite improving slowly. To continue the same treatment.

Saturday 17th. She has passed during

the last 24 hours ℥xxv of slightly acid urine, Sp. G. 1005. The quantity of pus about ¼ of the whole. Her bowels have been moved twice: the evacuations were rather liquid floating in them were some flakes of a yellowish white substance resembling curd. I do not think it amounted to quite ℥j. She tells me that this same substance has been passed by her twice before. By some mistake I was prevented from examining this substance microscopically. She had no unusual sensation at the time of passing it. She feels rather weak and her tongue is thick and coated. The Infus. Doosma and the dilute Sulphuric Acid are both to be discontinued and Chapmans mixture to be given in tablespoonful doses three times a day.

Sunday 12th. The amount of urine

passed since yesterday is about ℥xxv.
It was thick and turbid, the acid reaction
was more marked than on any previous
occasion. Sp. G. 1005. The amount of pus
1/5 of the whole. She has had during
the last 24 hours five loose evacuations
which have weakened her very much
No more of the white flakey matter was
passed. To have tablespoonful of chalk
mixture after each operation, add Sanda-
num if necessary.
Monday 5th. She passed during the
last 24 hours ℥xxxiv. of turbid acid
urine Sp. G. 1005. Soon after being passed
the urine gave off a very marked petid
ammoniacal odour. The amount of
pus is somewhat increased being about
1/4 of the whole. Her bowels have been
checked by the chalk mixture. She con-
to day of great drowsiness, dimness of

vision and itching all over her body, which is no doubt owing to deficient secretion of the uric acid and urea. She is still very weak although she takes a good quantity of wine and beef tea.

Tuesday 14th. She passed since yesterday only ℥xij in the chamber utensils which was I think owing to her passing some during each evacuation of the bowels of which she had four. Sp. G. 1010. Pus still increasing being nearly ½. Acid reaction not so well marked as yesterday. Operations were loose but normal in other respects. She tells me that during the last two days her urine has not caused the same amount of pain in passing which it caused before. She has been about all day and is not troubled with the nervous phenomena of yesterday.

Wednesday 15th. Amount of urine is about ℥xxvj. Sp. G. 1007. Slightly acid amount of

[illegible] between 4 & 6. Her bowels have been moved once since yesterday. She does not feel so well today, is very drowsy but is not troubled with itching. Continue same treatment. For the last four days she has been taking Ferri et Junia Citratis gr. v 3 times a day. Tuesday 21st. Passed during the last 24 hours ℥ xxxvj of her usual urine. The amount of pus has decreased being not more than ⅛. Urine is slightly acid in reaction. Says she feels better more than she has felt for a long time. Dr. Chen having ordered her Tinct. Ferri Chloridi gtt xv. 3 times a day I discontinued the citrates. Continue Chapman's Mixt. wine and beef-tea.

Wed. day 27th. I find but little improvement in her urine during the last week. It has the same turbid look pus again nearly ¼. Still, at times, has pain in passing

her water. She generally has some pain about the hypogastrium. Pain about the region of the kidney always always more severe during operations. Her former nervous symptoms have not troubled her for several days. Appetite good. Bowels regular and natural. In a word she is much improved but not to the extent which would allow of a very favourable prognosis.

This woman left for home on Tuesday August 28th since which time I have not heard of her.

Case VI

Caries of the Spine

Samuel Lloyd Aged 30 [illegible] by occupation was admitted April 11th 1860 suffering from what was supposed to be caries of the spine. He states that he has while at work been frequently obliged to lift very heavy bodies and thinks he has strained his back by so doing. In May 1859 He was attacked with a severe pain in the right lumbar region: this continued until December of the same year when he observed a swelling in the same region and soon afterwards in the right iliac portion, this increased gradually in size until March 1860 when an incision was made and a large quantity of pus was evacuated. He has also suffered with pain in the chest, has lost flesh and strength and several times has spit a small

quantity of blood. He is not certain whether any of his family have died with disease of the lungs. When he entered the house he was very much emaciated and very weak. he also appeared to suffer very much with pain in the lumbar region. He was ordered Symp. Ferri Iodidi gtt xx after each meal good [illegible] diet, and poultices to both iliac & lumbar regions. The puncture which was made in his back continued to discharge very freely, but it was soon found necessary to make an opening on the anterior portion of the abdomen owing to the accumulation of pus about iliac region. This gave him great relief. An injection of Tinct. Iodinii Comp ℥iij ā Aquae ℥vj was ordered to be injected into his back once a day. Also to have Huxhams Tinct of Bark 30 drops 3 times a day as a tonic. This plan of treatment was employed for five or

six weeks but without the desired result but still he was very much improved the amount of pus discharged was much diminished. His appetite improved, he gained in strength and also in flesh. He was removed by his friends in order that he might be nursed at home. No pieces of carious bone were discharged at either opening. It is exceedingly probable that Pulmonary tuberculosis is one of the principal disorders of this patient though nothing very definite was obtained from the examination of the chest. She was not much troubled with cough as a general rule but still he was seldom without more or less.

An

Inaugural Dissertation

On Cayalgia

Submitted to the Examination

of the

Provost Regents and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

By

Franklin Allen Bushey

Hip Joint and its Diseases.

The Hip Joint is an enarthrodial, or Ball and Socket Joint, composed by the Articulation of the "Femur" with the Os Innominatum; The Acetabulum, in which the Head of the Femur plays, is formed by portions of Three Bones; viz; Ilium, Ischium, and Pubes; The Ilium and Ischium each forming about two fifths; and the Pubes the remaining fifth of the "Articular Cavity;

The Ligaments of the Hip Joint are the capsular, Cotyloid, Ilio-femoral, Transverse, Ligamentum Teres, and Cervical;

1st The Cotyloid Ligament is a Prismoidal band of Fibro-Cartilage, intimately

The Quadratus Femoris arises from the external border of the Tuberosity of the Ischium, and is inserted into the

Linea Quadrata of the Trochanter Major, all the afore described Muscles (except Glutæus minimus) act as rotators of the Thigh outwards, the rotation inwards is performed chiefly by the Glutæus Minimus.

The Pectineus arises from the pectineal line of the crest of the Pubes and is inserted into the Linea Aspera, below the lesser Trochanter, this is an Adductor assisting the Adductors Magnus, Brevis Longus &c

The Muscles and Tissue of this joint, are abundantly supplied by numerous arteries, all being branches of the Internal Iliac and its Divisions;

The Obturator Artery is given off from the posterior trunk of the internal Iliac and passes forwards a little below the Brim of the Pelvis, to the upper border

of the Obturator Foramen, it escapes from the Pelvis, through an arch formed by the Obturator Membrane, which Divides into two Branches;

The internal curves around the bony Margin of the Obturator Foramen, between the External Obturator Muscle and rami of the Ischium, being distributed to the; Obturator, Pectineus, Abductor Muscles and organs of Generation, and inosculates with a branch, of the internal Circumflex; The external branch pursues its course along the outer margin of the Obturator Foramen, to the Space between the Gemellus inferior and Quadratus Femoris; where it inosculates with the Gluteal Artery;

The union of the branch of the Obturator with the internal circumflex, forms

the Artery that passes through the Notch of the Acetabulum (Ramus Acetabuli) which furnishes a Vascular supply to the articulation of the Hip, and especially to the Ligamentum Teres

The Veins, are superficial and Deep Divisions of either the Popliteal or Femoral Veins, all the muscular branches are received by the Femoral Vein, the Superficial Veins are, the External and Internal Saphenous

The Nerve of chief importance, concerned in the Disease under discussion is the Obturator, formed by a branch from the Third and another from the Fourth Lumbar Nerves, passing downward among the Fibres of the Psoas Magnus Muscle, through the angle of bifurcation of the Common Iliacs

Vessels, and along the inner border of the Pelvis, it joins the Artery and having escaped from the Pelvis, gives off small Twigs to the obturator Externus muscle and where it divides into four branches, Three Anterior ones passing in front of the adductor Brevis, supplying that Muscle the Pectineus, adductor Longus and Gracilis, and the Posterior branch passing down behind the adductor Brevis, and Ramifying in the Adductor Magnus; from the branch which supplies the adductor Brevis, a communicating filament passes outen and through the Angle of Bifurcation of the Femoral Vessels, to unite with the Long Saphenous Nerve. The Posterior Branch pierces the obturator Externus

Muscle, to which and to the adductor Magnus, it distributes branches, it also gives off an articular branch which pierces the adductor magnus Muscle and accompanies the Popliteal Artery to the Knee joint. * In a dissection which I made, from the Posterior branch a long cutaneous nerve proceeded to the adductor Longus Magnus Muscle, and which issued from near the inferior border of that Muscle, and from which communicating Filaments were given off to the plexus of * Saphenous Nerve, and descended to the inner side of the Knee where it pierced the Fascia, and communicated with the Long Saphenous Nerve

Thus we see the intimate communication that exists between the

* Plexus Patellæ

Nerves, supplying the Muscles of the Hip joint and Knee joint. and Remembering that, that Sympathetic Nerve gives branches to the Lumbar and Sacral Nerves, as they, passout from the Foramina, Keeping this fact in view, we may, in a degree, account Satisfactorily, and reasonably, for Pain existing in the Knee joint when the Hip joint is affected or diseased)

"Every Disease, furnishes Study of more or less interest to the observant Physicians Mind, and of the vast Catalogue afflicting humanity, the one more consideration* (we think) is highly worthy our attention; and this disease presents so many points of peculiar and serious importance, that it is usually and not improperly considered

* Coxalgia

as a distinct disease or affection apart from disease of other joints,
It usually occurs either as an acute chronic or sub-acute inflamatory affection. occuring mostly or most commonly in strumous constitutions, indeed I should suppose it to be more intimately connected with this Peculiar diathesis, than with any other and more distinctly marked in disease of the Hip joint than in the affections, of other joints in the Body and according to Erichsen it almost invariably occurs before the age of Puberty. in six cases which came under my notice. one occured at two Years and half old, 1 at 4, 1 at 7, 1 at 9, and one at 32, and also of 48 cases which came under the observation

Mr. Erichsen. only Fifteen occured at or after Fifteen Years of Age, and 6 above Twenty Years of age, Thus leaving Twenty Six out of Forty Eight, That were attacked by the disease under Fifteen years of age, But this opinion is not fully correct as shown by the Histories of Fifteen Cases occuring in the Hospital of Wards Island New York. 1 at 13, 1 at 15, 1 at 16, 1 at 17, 2 at 18, 1 at 19, 3 at 22, 2 at 23, 1 at 25, 1 at 26, and 1 at 36, Thus it is shown from observation, to be a disease that may attack persons of any age, from earliest Youth to full grown Manhood, and also it is shown that the disease may attack persons from earliest youths before Puberty. and rarely known to occur after the Age of

Forty Five years of Life have been passed
The causes which give rise to the [illegible]
may be divided into the Predisposing
and exciting
The most [illegible] of the [illegible]
ing, is the Scrofulous or Hereditary [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] tion, or any other
[illegible] [illegible], tending to [illegible] the
Constitution, as is too often the lot of
Syphilitic or Phthisical Parents whose
ally beget scrofulous offspring;
Syphilis has been given by some as a
[illegible] cause but [illegible] [illegible]
[illegible] yet fully established, also Physical
[illegible] [illegible] [illegible] [illegible] [illegible]
A Scrofulous diathesis in Youth is highly
predisposing [illegible] [illegible] but [illegible]
causes to develop the disease;

[illegible]
[illegible]
[illegible], by the slightest motion is
[illegible]
[illegible]
usually accompanies the formation of Pus
[illegible] character Hectic, Night Sweats, Emaci-
[illegible] & c follows and the patient succumbs
[illegible] the Disease from the exausting discharge
occasioned by the diseased bone,
[illegible] Inflamation. The 1st first Stage, is more
slowly developed, and its stages more certa-
[illegible] marked, at first there is but slight
[illegible]
[illegible] on the inner side which is
[illegible]
[illegible]
[illegible]
[illegible], if a child it lean on a chair, or

will give no additional Pain, if [illegible]
[illegible]
[illegible]
[illegible] Hip, the appearance of the [illegible]
[illegible] or Atrophied; and the inclination of the
[illegible] between the Nates, the position of the
[illegible] Limb are invaluable signs, which
[illegible] once seen are always readily recognized
[illegible] to be distinguished from [illegible]
[illegible] Prognosis.

Not unfavorable
if the patient be young, of good [illegible]
[illegible] of [illegible] good strength
[illegible] most generally the progno-
sis is [illegible], [illegible] the most fa-
vorable circumstances, and the most
[illegible] treatment, the motion and [illegible]
of the joint [illegible] for [illegible]
[illegible] hopeful prognosis in any case

being implicated, and the head of the
bone resting on the Dorsum Ilii; in a
Carious or diseased condition, with
Sinuses running down; the patients
System reduced by Hectic Fever, result-
-ing from the Irritation arising from
the disease, the Surgeon would be
justified in undertaking the Operation
by removing the cause of the disease
and also with the View of preserving
the patients life, in accordance with
those general principles which guide
us in the management of diseases
Bone in other Situations, the cases however
in which this peculiar combination
of circumstances occur, and in which
such an Operation would be required
are very rare; the great objection
to this Operation, in the majority of

An
Inaugural Dissertation
on
The Eye.

Submitted to the Examination of the
Provost. Regents and Faculty of Physic
of the

University of Maryland.

by

William Henry H. Wilkisson.

I

The Eye.

Of all the organs of sense, that to which we are most largely indebted is unquestionably the eye. It, alone, gives us the widest and most varied range of observation. The pleasures and advantages we derive from it, directly and indirectly, have neither cessation nor bounds. It, guides our steps through the world we inhabit; and, invests us with a space-penetrating power to which there seems to be no practical limit. The eye, considered in itself apart from its uses, is a most interesting and instructive object. It affords beyond comparison the most beautiful example of design, structure, and contrivance, that is to be found in the animal economy. It is situated in the orbital cavity, formed by the juxtaposition of the Os frontis, Os Sphenoidale, Os Ethmoides, Os Maxillare, Os Malæ, Os Unguis and Os Palati. In the receptacle thus constructed it is man-

ifestly securely protected from injury both poste-
riorly and laterally, while anteriorly it is guard-
ed by the palpebræ; and its position is such as
to insure the most extensive range of sight. It is
acted upon by numerous muscles, by which it
can be directed to any part of the orbit; and sup-
plied by many arteries, veins, and nerves.

The form of the eyeball is that of a sphere of
about an inch in diameter, having the segment
of a smaller sphere engrafted upon its anterior
surface, from which circumstance the antero-
posterior diameter exceeds the transverse by a line.
This segment of the globe is transparent, and is
formed by the cornea, which constitutes one-sixth
of the ball; the remaining five-sixths are formed
by the sclerotica, the tunic of protection to the
eyeball; this membrane is opaque, and hard and
resisting, like all fibrous tissues. The axes of the

the eyeballs are nearly parallel with each other, and therefore do not correspond with the axes of the orbits, which are directed outwards. The optic nerves follow the axes of the cavities, and consequently enter the eyeballs a little to their inner or nasal side. The globe of the eye is composed of several investing tunics, and of fluid and solid refracting media, called humors. The tunics are the following three:- 1 Sclerotic and Cornea. 2 Choroid, Iris, and Ciliary Processes. 3 Retina. The refracting media are the same in number:- Aqueous. Crystalline (lens) and Capsule. Vitreous.

The sclerotica and cornea form the external tunic of the eyeball, and give it its peculiar shape. They are essentially fibrous in structure, the sclerotic being opaque and forming the larger portion of the globe, the cornea being transparent and forming the remaining part....

The sclerotic receives its name from its extreme density and hardness; it is a fibrous membrane, resembling parchment, being firm and unyielding. Near the middle of the posterior convex surface, where it is thicker than any where else, it is pierced by the optic nerve, whose sheath is continuous with the sclerotic; the thickness of this coat diminishes gradually as it approaches the opposite side. The ciliary nerves and arteries also penetrate its substance obliquely in several places. The course of the nervous filaments through this coat is somewhat singular; they enter the convex side at some distance from the optic nerve, and running through its substance, pierce the concave side near the cornea. It is covered anteriorly by a thin tendinous layer, the tunica albuginea, derived from the expansion of the tendons of the four recti muscles. It gives attachment by its poste-

rior surface to the two oblique muscles. The tunica albuginea is covered, for a part of its extent, by the mucous membrane of the eye, conjunctiva; this is of a pearly whiteness, and very brilliant, which circumstance gives occasion to the common expression, "the white of the eye."

At the entrance of the optic nerve, the sclerotic forms a thin, cribriform lamella (lamina cribrosa), which is pierced by a number of minute openings for the passage of the filaments that compose the optic nerve; the membranous septa dividing these small foramina from one another are continuous with the processes which separate the bundles of nerve-fibres. One of these foramina, larger than the others, and situated in the centre of this lamella, is called the *foramen opticum* through which the arteria centralis retinæ enters the ball of the eye. Anteriorly the sclerotic presents a ver-

elled edge which receives the cornea in the same manner that a watch-glass is received by the groove in its case; it overlaps it more on the outer than upon its inner surface.

This coat is formed of white fibrous tissue intermixed with elastic fibres and fusiform cells. These are collected into small bundles, and arranged chiefly in a longitudinal direction. It yields gelatin when boiled. Its vessels are not numerous, the capillaries being generally of small size, and widely disseminated. Some anatomists maintain that it has nerves, while others strenuously oppose this conclusion. Their existence however is doubtful.

The Cornea - from corneus, horny - is the transparent projecting part of the external tunic of the eyeball, and forms, as I said above, the anterior sixth of the globe. In its form it is circular,

and something more convex than the sclerotic, or cornea opaca as it was formerly called, so that it represents the segment of a small sphere added to the segment of a greater; but this difference is not equally perceptible in all persons. It is received by its edge, which is sharp and thin, within the border of the sclerotic, to which it is strongly adherent; it is thicker than the anterior portion of that tunic. When viewed from the exterior, its transverse diameter is seen to be greater than the vertical, owing to the overlapping of the margin of the sclerotic above and below; on the interior however its outline is perfectly circular. It is convex without, and, consequently concave within, in other words its general shape is concavo-convex. Its degree of curvature varies in different persons, and in the same person at different periods of life, being more prominent in the young than in the old, in

whom it becomes flattened. This difference in the greater and smaller convexity of the cornea, influences considerably the refracting power of the eye, and is the principal cause of the long and short sight peculiar to some individuals. To diminish this defect the former wear concave glasses; the latter, convex. It is of the same thickness throughout.

The cornea is composed of five laminæ, all of which are closely united to each other: namely, of the conjunctiva; of the cornea proper, which forms the centre and is the basis; of the anterior elastic coat covered by the conjunctiva; of a posterior elastic coat; and of a membrane, which lines the anterior chamber of the eyeball.

The proper substance of the cornea is fibrous in structure, tough, unyielding, perfectly transparent, and is a continuation of the sclerotic, with which it is identical in structure. It is composed of a great

number of fusiform cells, at least sixty, all of which have the same direction; in the interstices are seen, by the aid of microscope, a large number of pores, through which a very fine fluid is continually being discharged, which soon after evaporates; we are told, that it has been detected, by pressing the eye, soon after death, having previously wiped it clean; we then see a gradual collection of a very subtile fluid, which forms itself into little drops. It is this dew that forms a kind of pellicle on the eyes of dying persons, and sometimes cracks after they are deceased.

The anterior and posterior coverings of the cornea proper are remarkable for their perfect transparency, even when submitted to the action of water, alcohol, or acids for many days; while the cornea proper is rendered opaque by the same immersion. Another character is their great elasticity, which causes them to roll up when cut or torn, in the same manner as

the capsule of the lens. This membrane, as I previously intimated, is connected by means of a fine cellular net to the proper substance of the cornea both before and behind. The use of this layer, according to Dr. Jacob, is "to preserve the requisite permanent correct curvature of the flaccid cornea proper."

The conjunctiva, which covers the anterior elastic lamina, is extremely thin and closely connected; no vessels have been traced into it in a healthy adult. In the fœtus, fine capillary loops extend for some distance forwards into this membrane; but in the adult, they pass only to the circumference of the cornea.

The lining of the aqueous chamber, which covers the posterior elastic layer, is composed of an epithelial membrane. It consists of only one lamina of polygonal transparent nucleated

cells, similar to those found in other serous cavities.

The cornea contains no vessels. Lymphatics have not, as yet, been found to exist in it. The twenty or thirty nerves which enter its substance are derived from the ciliary nerves. They ramify throughout its substance in a network of extreme delicacy.

The second tunic of the eyeball is formed by the choroid behind; the iris (the ciliary processes being an appendage developed from its inner surface) in front; and by the ciliary ligament, and ciliary muscle, at the point of junction of the cornea and sclerotica.

The choroid takes its name from chorion, a vascular membrane, of peculiar structure, belonging to the fœtus. It is an exceedingly thin membrane, highly vascular, of a rich chocolate-brown color upon its external surface, and of a deep black color within. It is connected to the scle-

rotic by, an extremely fine areolar tissue, and nerves and vessels. Internally it is in simple contact with the third tunic of the eye, the retina. It is perforated behind by the optic nerve, and terminates in front at the ciliary ligament, where it bends inwards and forms a series of folds, called the ciliary processes. It is much thicker behind than in front.

The choroid is composed of three layers, external, middle, and internal.

The external, or venous layer consists of the larger branches of the ciliary arteries, which proceed forward in company with, and between the veins before they bend downwards to terminate on the internal surface. This coat, however, is composed principally of veins, which are arranged in curves: hence they have been named venæ vorticosæ. They converge to form four or five large

trunks, which are at equal distances apart, and which pierce the sclerotic midway between the margin of the cornea and the entrance of the optic nerve.

The middle layer consists of a fine capillary network, formed by the union of the short ciliary vessels, and is named Membrana Ruyschiana, after M. Ruysch, who first discovered it. The plexus is exceedingly close, and finer at the hinder part than in front.

The internal, or pigmentary layer is thinner than the external, and consists of a single lamina of nucleated cells filled with pigment granules, and applied to each other so as to resemble a tessellated pavement. Each cell is loaded with pigment, which is in greater abundance at the circumference of the cells. The color of the substance filling these cells is black, with a

mixture of red, and when put into a vessel containing water, it turns it black.

In animals, the pigmentum nigrum, on the posterior wall of the eyeball, is replaced by a layer of considerable thickness, and of metallic brilliancy, called the tapetum.

The ciliary processes consist of a number of triangular folds, formed by the folding inwards of the middle and internal lamina of the choroid at its anterior margin, and are received between corresponding foldings of the suspensory ligament of the lens, thus establishing a connection between the choroid and third tunic of the eye. According to Krause, they are about sixty in number, and are arranged in a circle around the margin of the lens. They may be divided into large and small, the latter, constituting about a third of the entire amount, are situated in the spaces between the former but

without regular alternation. The larger processes are hemispherical in shape, about one-tenth of an inch in length, and their periphery is attached to the ciliary ligament, and through it continuous with the inner and middle layer of the choroid: the opposite free margin rests upon the circumference of the lens. The anterior surface corresponds with the iris; the posterior is closely connected with the suspensory ligament of the lens.

The structure of the ciliary processes is similar to that of the choroid; the vessels are larger. They are covered with a thick layer of pigmentum nigrum, which is more abundant upon them, and upon the anterior part of the choroid, than upon the posterior. When the pigment is washed off, they appear white.

The ligamentum ciliare, or circle, is the bond of union between the external and middle tunics of the eyeball, and serves to connect the cornea and scle-

rotic, at their line of junction, with the iris, and external layer of the choroid. It adheres so closely to the sclerotic, that if (it is said) we blow through a small hole made therein, without touching the choroides, the air will penetrate everywhere between the two coats, but cannot destroy this adhesion, or pass to the cornea. At its point of union with the sclerotic, a minute canal is situated between the two, called the sinus circularis iridis.

The iris (iris, a rainbow), so named from the variety of color presented in different individuals, is a thin, circular, contractile septum, suspended in the aqueous humor, between the anterior and posterior chambers, behind the cornea and in front of the lens. It is pierced somewhat to the nasal side of its centre by a round opening for the transmission of light to the posterior part of the eye; this aperture is called the pupil. It is intimately connected by

its circumference, with the choroid; and to the sclerotic and cornea by means of the ciliary ligament. Its surfaces are flattened; the anterior surface looks towards the cornea; it is variously colored, and marked by lines which converge towards the pupil; the posterior presents toward the ciliary processes and lens. The posterior layer is of a deep purple tint, and is thence named uvea, from its resemblance in color to a ripe grape.

The iris is composed of three layers: fibrous, muscular, and pigmentary.

The fibrous stroma consists of fine, delicate bundles of fibrous tissue, which have a circular direction at the circumference, but the chief mass converge from near the circumference towards the centre, and have the power of dilating the oculi pupilla. These fibres interlace and form a delicate mesh, in which are contained vessels, nerves, and pigment cells.

The muscular coat is involuntary, and is composed of radiating and circular fibres. The radiating fibres converge from the periphery to the centre and blend with the circular fibres, which surround the pupil, on the posterior surface of the iris, like a sphincter, and by their action produce contraction of its area.

A few pigment cells are situated in the stroma, and there is also a distinct layer, on its anterior surface. In the fibrous stroma the cells contain pigment of different colors, according to the various shades of the eye. On the front of the iris, there is a single layer of oval cells. There are several layers of small cells, filled with a dark pigment, on the back.

The arteries which supply the iris with blood, are derived from the vessels of the ciliary processes, and from the long and anterior ciliary.

In the fœtus the pupil is closed by a fine, vascular membrane, the membrana pupillaris, which

divides the space in which the iris hangs into two distinct apartments. Between the seventh and eight month, this membrane begins to be gradually absorbed from the centre towards the circumference, and by the ninth month only a few shreds remain. Sometimes however it fails to be absorbed and blindness is the result.

The ciliary muscle is a greyish circular band, about one-eight of an inch broad, placed on the outer surface of the fore part of the choroid. The fibres are placed longitudinally, and have their origin at the point of junction of the cornea and sclerotica. Passing backwards they are inserted into the choroid. This muscle, by exercising compression on the vitreous humor, and by drawing the ciliary processes towards the point of connection of the sclerotic and cornea, advances the lens, and by this means adjusts the eye to the vision of near objects.

The third coat of the eye is of a very different texture from that of the other two. It is soft, transparent, of a pinkish-gray color in the fresh state, and gradually diminishes in thickness from behind forwards. Its external surface is in contact with the pigmentary coat of the choroid; its internal with the vitreous body. Behind it is continuous with the optic nerve; and in front, extends nearly as far forwards as the ciliary ligament, where it ends by a rough margin, called the ora serrata. In the centre of the posterior part of the retina is found a yellow spot, termed limbus luteus, of a circular form, and having a central depression, fovea centralis. This part of the retina was formerly called the "foramen of Tremmering," because it is so thin the dark color of the choroid is distinctly seen through it; so that it presents the appearance of a hole, and hence the name which it first received was not altogether inappropriate. It has

been found only in man, the quadrumana, and some saurian reptiles. A little to the inner side of the yellow spot, the optic nerve enters; the arteria centralis retinæ pierces its centre.

The nervous membrane or retina, is composed of three layers, together with blood vessels, which do not form a distinct layer, but ramify in the substance of the inner lamina. The laminæ are as follows: External, columnar, or Jacobs membrane; Middle or granular layer; Internal or nervous layer.

The External or Jacobs Membrane is extremely thin, and can be easily detached from the middle lamina by the handle of the scalpel, in the form of a flocculent film. It consists of rod-like bodies of two kinds: Columnar rods are arranged perpendicular to the surface. Bulbous particles or cones are interspersed at regular intervals among the former; these are conical, their bases resting upon the granular

layer, the narrow pointed extremity being directed toward the choroid; they are not solid like the columnar rods, but consist of an external membrane with fluid contents.

The middle or granular layer forms a third of the thickness of the entire retina. It consists of three layers, the innermost of which has been termed by Mr. Bowman the nummular layer from its resemblance to pieces of money seen edgeways.

The internal or nervous lamina is the expansion of the optic nerve, and forms a thin semi-transparent bluish white layer.

An extremely thin structureless membrane lines the retina, and separates it from the vitreous humor; anatomists call it membrana limitans.

The arteria centralis retinae pierces the optic nerve, and passes forwards through the porus opticus to the retina, where it divides into

four or five branches; they at first run between the hyaloid membrane and the retina; but they soon enter the latter membrane, and form a close capillary network in its substance. At the ora serrata they terminate in a single vessel. It supplies the retina and hyaloid membrane; and, by means of a branch sent forward through the centre of the vitreous humor in a tubular sheath of the hyaloid membrane, the capsule of the lens. A vein accompanies it into the nervous membrane.

The humors come next in order; but before they are described, I propose to speak of the chambers of the eye.

The anterior chamber is the space intervening between the cornea in front, and the iris and pupil behind.

The posterior chamber is smaller than the anterior, being less than half a line in depth; it is bounded by the iris in front, and by the capsule

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of the lens and its suspensory, and the ciliary ligament behind. I think it would be more appropriate to call both these chambers, or the whole space occupied by the aqueous humor, the anterior, and the cavity in which the vitreous humor is contained the posterior chamber; because the room occupied by it is really the posterior chamber.

The aqueous humor is situated in the anterior and posterior chambers of the eye; it is a weakly albuminous fluid, having an alkaline reaction, and a specific gravity very little greater than distilled water. It scarcely, according to Petit, exceeds four or five grains in weight. It is composed chiefly of water, less than one-fortieth of its weight being solid matter, principally chloride of sodium. It completely fills the two chambers. After birth the two chambers communicate through the pupil; but in the foetus there is no communication.

VIXI

It has, generally been supposed that the chambers are lined by a distinct membrane, the secreting membrane of the aqueous humor, similar in structure to a serous sac; it has however never been detected. An epithelial covering can be found on the posterior surface of the cornea. The chambers however do secrete a serous fluid, because it has been found before the removal of the membrana pupillaris. Dr. Gray says, it is probable that the parts concerned in the secretion of the fluid are the ciliary processes, both surfaces of the iris and the posterior surface of the cornea.

The vitreous body is a clear and very liquid gelatinous fluid, contained in a fine transparent capsule, the hyaloid. It forms about four fifths of the entire globe, filling the greater part of it, that is, almost all the space which answers to the extent of the retina, except a small portion

behind the iris, where it forms a fossa, in which is lodged the crystalline lens. From the inner surface of the hyaloid numerous lamellæ are projected inwards in a radiating manner, and form compartments in which the fluid is contained. They are arranged, according to Hannover, something like the lamellæ of an orange, and are about a hundred and eighty in number. In the adult these lamellæ cannot be detected by aid of the most powerful microscope; but in the fœtus can be perceived a peculiar fibrous texture, the fibres joining at numerous points, and presenting minute granules at their point of junction.

In the centre of the vitreous humor is a tubular canal, through which a small artery passes from the arteria centralis retinæ to the capsule of the lens. In the fœtus this vessel is easily injected.

The <u>crystalline humor</u> or <u>lens</u>, inclosed in its

capsule, is placed in front of the vitreous body, and immediately behind the pupil, and is surrounded by the ciliary processes which slightly overlap it margin.

The capsule of the lens is a transparent, highly elastic, and brittle membrane, which encloses the lens. It rests in a depression in the anterior part of the vitreous humor; in front it forms part of the posterior chamber of the eye; and is held in position chiefly by the suspensory ligament of the lens. It is much thicker in front than behind, and when ruptured the edges roll up with the outer surface innermost, like the elastic lamina of the cornea. The lens is supposed by Dr. Jacob, to be connected to its capsule by means of areolar tissue, and that the liquor Morgagni is the result of a cadaveric change.

The lens is a lenticular body, of a pretty firm consistence, and transparent like crystal. It is a double convex lens; but its posterior surface is more convex

than the anterior, the convexity however of both sides is very nearly the same, the transverse diameter measuring a third of an inch, the antero-posterior a fourth. It is composed of concentric layers, of which the external are soft, the ones directly beneath firmer, and the central forming a hardened nucleus. When the lens is immersed in alcohol another division takes place: it splits into three triangular segments, which have their edges directed towards the centre, and the bases towards the circumference.

The <u>suspensory ligament</u> of the lens is a thin, transparent membranous structure, placed between the vitreous body behind and the ciliary processes in front; it connects the anterior part of the retina with the anterior surface of the lens, near its circumference. It assists in retaining the lens in its position. Its outer surface presents a number of folds, in which the corresponding folds of the choroid are received.

The lens changes its shape in the same individual at different periods of life. In the fetus it is nearly spherical, of a reddish color, and so soft as to readily break under the fingers. In the adult the posterior surface is more convex than the anterior, colorless, and firm in texture. It increases in density, becomes flattened on both sides, slightly opaque, and of an amber tint.

The canal of Petit is one-tenth of an inch wide, and formed by the ciliary processes and the lens. It is bounded above by the line of divergence of the ciliary processes, and below by the periphery of the lens.

The vessels of the eye are the long and short, and anterior ciliary arteries, and the arteria centralis retinæ which has already been described. The long ciliary arteries two in number, pierce the back part of the sclerotic, and pass forward on either side, between that membrane and the choroid, to the ciliary muscle, where they each divide into two branches, an upper and lower,

which anastomose and form a vascular ring around the outer margin of the iris: from this ring branches are given off, which unite and form a smaller circle round the pupil. The short ciliary arteries penetrate the posterior part of the sclerotic, around the entrance of the optic nerve, and divide into branches that run parallel with the axis of the eyeball: they are distributed to the ciliary processes, and middle layer of the choroid. The anterior ciliary are branches of the muscular and lachrymal branches of the ophthalmic. They enter the eye through the anterior part of the sclerotic, immediately behind the cornea, and are distributed to the ciliary processes, some branches joining the greater vascular circle.

The veins are four or five; they are derived mainly from the surface of the choroid, and, penetrate the sclerotic midway between the cornea and optic nerve, and terminate in the ophthalmic vein.

An

Inaugural Dissertation

On

Typhoid Fever,

Submitted to the Examination

of the

Provost, Regents, and Faculty of Physic

of the

University of Maryland,

For the

Degree of Doctor of Medicine.

By

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of

Maryland.

Typhoid Fever.

Typhoid fever is the principle febrile affection met with on the Continent of Europe and in Great Britain and is not uncommon in the United States. In its inception it is often diversified in its character and is presented to us under a variety of modifications; these differences frequently make it difficult for the physician at the commencement to decide the precise nature of the disease; the deviations in form are no doubt produced by the influences surrounding the subject or the degree of vital energy possessed by the system at the time of attack, and may be considered as merely secondary or accidental, nevertheless, the marks of the disease are sufficiently distinctive to enable us to decide its character. The facts relating to this subject will be alluded to when speaking of the nature of the disease and its modifications.

Symptoms— It is sometimes preceded by

a chill which is followed by the ordinary signs of fever, but more frequently the attack is insidious. The patient grows weary, languid and prostrate, and there is slight headache and heat of skin, flushed face, quickness of the pulse, the tongue is furred, very slightly coated with a thin whitish fur, the appetite is somewhat impaired, these symptoms continue, slowly increasing in intensity with a tendency to daily remissions for a few days, or sometimes a longer period, before the patient feels so unwell as to seek the bed, and sometimes during this period, slight chilliness alternating with febrile sensations occur.

As the disease progresses and becomes completely formed new symptoms appears and those already in existence become aggravated, there is greater prostration, drowsiness and stupor with dullness of intellect, ringing in the ears sometimes accompanied with deafness, there is sometimes looseness of the bowels, often amount-

ing to diarrhœa, but when this is not the case there is a great susceptibility to the action of cathartic medicines. There is frequent pulse, hot and dry skin, flushed face, pain in the head, loss of appetite, thirst and great weakness, the pulse varies very much, sometimes being not over ninety or a hundred, and very strong and full, but at other times, and particularly in females it is very frequent, small and compressible, and from one hundred and ten to a hundred and twenty.

The flush of the face is of a darker hue, headache is pretty constant, restlessness with absence of sleep, accompanied with delirium, the expression of the countenance is also altered from that of intelligence to one of dullness.

Pains in the back and limbs are often present and sometimes a feeling of soreness, as if bruised or greatly fatigued. Bleeding from the nose is a frequent-

symptoms in many cases. In many cases remissions of the febrile symptoms are observed, sometimes they occur once and again twice a day, sometimes the exacerbation subsides with slight perspiration, though it is less frequent in this than in bilious and miasmatic fevers.

As the disease continues the pulse is more frequent and has less strength, the heat of the skin is acrid and pungent, the dull expression of the countenance and dusky hue of the complexion increase, the tongue becomes coated with a thick fur, and often red at the tip and sides, the stomach though calm, is sometimes irritable, there is also diarrhoea with thin, watery or yellowish or brownish discharges, the pains in the abdomen increased by pressure particularly in the right iliac region, a tympanitic distension of the bowels upon percussion with a gurgling sound on pressure, a cough often comes on which is either dry or mucous, and there are signs of

bronchitis, the urine is sometimes scanty, high colored and offensive. These are the symptoms generally exhibited in the disease until its complete formation.

Other phenomena are now presented, the tongue which was before mostly moist or clammy, now becomes quite dry, and of a brownish color and cracked, and there is sometimes painful and difficult deglutition, the abdomen greatly distended, there is tympanitis upon percussion. If the surface be carefully examined, red or rose colored spots will be found upon the abdomen, which after a time increase in number, and sometimes extend to the chest, and even to the limbs, previously or about the same time a vesicular eruption, sudamina, is also exhibited on the upper part of the chest and neck, and sometimes on other parts of the body.

The nervous system is now more greatly disturbed, delirium, stupor and deafness are increased.

and spasmodic tremors appear, the eyes are often injected, the tongue is protruded with difficulty and sometimes trembles in the effort.

If the disease continues, the tongue is often coated with a black or brown crust, or is dry, gashed or sore, and black sordes collect upon the teeth, gums and lips, the pulse is very frequent and feeble, the surface is either hot and dry universally, or hot in some parts and cold in others, often an offensive odor exhales from the body, the patient is very feeble and lies on his back and gradually slides down in the bed, he picks at the bed clothes or imaginary objects in the air, there is low muttering delirium or complete coma, and sometimes while delirious attempts to arise from bed.

In severe cases the fœcal discharges are involuntary, urine retained, hemorrhage from the bowels or nostrils, petechia upon the skin; the vitality of the

skin is so feeble that blistered surfaces often slough, and a tendency to gangrene and sloughing in parts where there is continued pressure, as the sacrum and hips.

When a fatal end is to ensue, which may take place any time after the eighth day collapse appears, the pulse gives way and is either very frequent and fluttering, or slow and hardly perceptible, the extremities become cool and clammy, or the whole surface is bathed in a clammy sweat; often the abdomen is enormously distended, sometimes there is hiccough, and life is quietly and almost insensibly extinguished; sometimes when death occurs earlier, it is preceded by painful struggles and convulsions; a salutary result may take place at various periods after the fifteenth day and may be prolonged even to the fortieth, or even longer.

Convalescence is ushered in by the tongue becoming moist and begining to clean gradually at the

tip and edges, the pulse becomes less frequent and fuller, moistness and coolness of the skin occur, stupor or delirium subsides, and an inclination to sleep appears, and the patient gives evidence of returning intelligence, the distension of the abdomen diminishes, and there is a desire for food.

We do not always have so speedy and satisfactory a termination of the disease. It frequently happens that this fever is protracted and its progress different, the tongue does not dispose of its coat in the same manner, but the cleaning commences at the centre in flakes and leaves the surface smooth and shining. Aphtha make their appearance about the fauces, and the tongue after cleaning, again becomes coated and this change may again be repeated, during this time being alternately moist and dry, should the tongue now remain dry the symptoms will be aggravated, and the patients life will be endangered.

After this recurrence of the disease, many of the unfavorable symptoms reappear, viz; nervous derangements, febrile paroxysms, derangement of the appetite, and disturbance of the bowels, glandular swellings, swelling of the lower extremities, and the hair falls from the head. All these symptoms however gradually disappear and the patient goes on to convalescence.

Sometimes a very unexpected and fatal change takes place in consequence of perforation of the bowels, and escape of their contents into the cavity of the abdomen. The evidences of this morbid condition are sudden and violent pains in the bowels, with considerable tenderness, chilly sensations, anxiety of countenance, vomiting, contracted pulse and constipation of the bowels, followed very soon after the seizure by death, although life is occasionally prolonged a

few days, this is not the termination of the most violent cases only, the mildest ones sometimes have the same end.

There are many prominent features in this disease, which will aid us in making our diagnosis and prognosis.

Diarrhoea is so frequently present that it may be considered a distinctive mark of the disease. For although there may not always be liquid stools, there is such a constant tendency to looseness of the bowels, upon the use of the mildest purgatives as to confirm the opinion advanced by some authors that it is diagnostic of the disease, in other fevers the bowels are usually constipated, there is a difference in the character of the stools whilst they are thin and liquid in this fever and natural in color, in other severe fevers they are generally much altered. Sometimes however they are black or bloody, particularly in the advanced stages.

This condition is no doubt the result of inflammation or irritation of the intestinal mucous membrane. It is very often accompanied with pain.

Tympanitis is another abdominal symptom which seems to be peculiar to this disease. It may occur early in the disease, but the usual period is about the seventh day, it is very distressing to the patient by interfering with respiration, when there is much distention. Sometimes it is slight and does not cause any inconvenience, it is increased with the advancement of the disease and disappears as the case proceeds to a favorable issue.

The rose colored eruption, although not present in every case, may be considered a characteristic of this disease. They are small oval red spots, about a line in diameter and slightly elevated, disappearing upon pressure but returning when it is removed, and are gen-

rally limited to the abdomen and chest. They usually appear about the seventh or fifteenth day, sometimes so early as the fourth, they vary in number, in some cases they are few, in others very numerous. They occasionally occur in crops, one succeeding as another disappears.

They are distinguished from petechia by the latter being of a livid color, not projecting above the surface and not disappearing on pressure.

Sudamina a transparent vesicular eruption, appear in this disease, about the size of a pins head, but may be larger, they are either circular or oval; they are frequently detected by the touch, they usually occur upon the neck and upper part of the chest, especially toward the shoulder or near the axilla. They cannot be considered characteristic of this disease, as they occur in other fevers.

Cough although slight often accompan-

ies this affection, the breathing may be more or less hurried, and if the ear or the stethescope be applied, sonorous, sibilant or mucous rales may be found. It sometimes increases until we have decided symptoms of pneumonic inflammation. The affection of the chest is not always present, neither does it commence with the disease.

The pulse is generally increassed, and may be full and strong, or soft and feeble from the first. It varies in different cases and according to the period of the disease. In mild cases, and in the early stage of those of a more severe form, some acceleration with some fullness and strength is observed. But a frequent, small and feeble pulse is to be most relied upon, this may be the condition in the begining, if it is not so, as the disease advances these signs of debility appear. The pulsations at first are often from one hundred and ten

to twenty, and even as high as one hundred and thirty to forty, or may rise as high as one hundred and sixty in the minute before the close of the disease. In the last stage being frequent and feeble, it is irregular and intermittent, and sometimes may be slower than natural.

Hemorrhage is of frequent occurance in this affection, and in the early stage takes place from the nostrils, and is an important sign, it is usually moderate often not more than a few drops, and is seldom alarming, but in some rare cases it is very copious, especially at a late period. The hemorrhage from the bowels, which sometimes occurs in the advanced stage is of more importance and is an unfavorable sign, although ~~not necessarily~~ fatal. Particular attention should be paid to these hemorrhages, as they are detrimental by the exhaustion they produce, occasionally the blood seems a little changed, at other times it is blackish,

sometimes hemorrhage takes place from the mucous surfaces, giving evidence of a depraved condition of the blood.

Nervous symptoms are also very prominent and troublesome, Local affections of the head are seldom absent during the whole course of the disease. Headache most frequently occurs, and generally, sometimes during the disease, sometimes it is felt in the back of the head, sometimes a throbbing in the temples, and again affecting the whole head, and consists of a heavy and dull pain, and when violent and of long continuance it often gives way to stupor or delirium.

Dullness of intellect often occurs early in the disease, and shows itself in the vacant or dejected expression of the countenance which often increase as the disease advances; often amounting to great stupor and even coma, but generally the patient can be aroused, sometimes there is morbid vigilance and great restlessness

with tremors. The delirium generally occurs early, but not in a great degree until about the seventh day, it is generally mild, which indicates want of power in the brain, rather than irritation, the mind is generally observed to be wandering, evincing ignorance of persons and things. In some cases the delirium is violent and furious, with loud and incessant ravings, and corporal restraint has to be used, sometimes fanciful and whimsical opinions are entertained and efforts made to put them in practice.

In the last stages the previous high delirium passes into a low and muttering form, with ~~st~~ slight ravings, the patient lies on his back with his eyes half closed, and mouth open and moaning, passes gradually into an utterly prostrate condition, but it may be violent in this stage also, and restraint has to be sometimes used.

Dulness of hearing does not generally occur in the early stage of the fever. It is sometimes slight, at others it may be so great as to amount almost to deafness, and is frequently preceded by or accompanied with tinnitus aurium.

There is a tendency to sloughing of the skin, which is more marked in the latter than in the early stage, it occurs more particularly when the surface has been inflammed by blisters, or sinapisms, or abraded, or by the body lying in one position for a long time. The patient not being sensible for the greater part of the attack, is not aware of the danger and does not change his posture. A redness followed by a seperation of the cuticle, and sloughing of the skin and lastly an ulcer reveals the mischief produced by interrupted capillary circulation and diminished vitality of the surface.

There is another symptom which it will

be well to mention, that is retention of the urine, which is of frequent occurance in the advanced stage, the distention of the bladder is very great, and is also a consequence of the insensibility that generally exists, the bladder looses its contractile power by the over distension, and as a consequence the accumulation of urine goes on increasing until the bladder is enormously distended, and inflammation or rupture of the coats of the bladder may occur. In all cases of Typhoid fever the practitioner should be on his guard against this accident in the latter stages, and not allow himself to be deceived by the existence of tympanites. It may usually be detected by the dull sound upon percussion over the pubes.

This complaint often presents a variety of complications. In many case we have only the mild form, with a slight disturbance of the bowels, some meteorism of the abdomen and perhaps a few rose colored

spots. The tongue being moist, soft and whitish throughout, there is no nausea or vomiting, slight disorder of the nervous system, no extreme debility, and in short none of those peculiar typhous symptoms. The disease may run its course in two or three weeks, or even in a shorter time, almost subsiding spontaneously, requiring very little medical attention. These cases may be confounded with remittent fever, more especially when they have a remission and exacerbation of the febrile symptoms daily.

Sometimes we find cases in which the patient for several weeks complains of feeling uncomfortable, is languid and disinclined to engage in his usual pursuits, the pulse is slightly quickened, tongue white, moist, and a little furred, sometimes a very little headache and debility, not sufficient even to require confinement to bed, a diarrhea is the most important symptom, and leads us to believe, without a close examination that we have

to deal with chronic inflammation of the bowels, but the character of the disease may be often detected by an examination of the abdomen, which is somewhat tympanitic in nearly all cases, and often the rose-colored spots are present. Under such circumstances if we do not adopt measures to remove this condition, we may have to treat the disease in its most violent form.

The head, chest and abdomen are generally involved in this disease, but symptoms of the head and abdominal disturbance are most frequently present, and may be considered characteristic of the disease. Local affections of the brain may be so intense from the first as to attract particular attention. Violent headache raving delirium, great stupor and coma with evidences of inflammation of the cerebral membranes, and symptoms of vascular excitement in the head, viz; redness of the conjunctiva, throbbing of the temples and intolerance

of light occasionally occur.

The stomach, bowels and liver frequently suffer in this disease; loss of appetite, nausea and copious vomiting, although the appetite may sometimes be increased, the vomiting does not usually occur early in the disease, but there may be nausea; bilious matter mingled with mucous is freely vomited up. Sometimes the disease begins with diarrhoea, although costiveness may be present, and continue in spite of remedies until a fatal issue, the stools vary in color, consistence and odor.

The chest is commonly affected, but sometimes prominent and dangerous symptoms are exhibited. Great oppression in breathing, violent cough, copious expectoration, bloody sputa, pain in the chest, indications of bronchitic, pleuritic or pneumonic inflammation besides the proper fever.

Besides the varieties already mentioned, there is another in which we have symptoms of extreme prostration of the vital powers, the weak and frequent pulse, feeble intelligence, fœtid breath, blackness of the tongue, and sordes on the teeth, the stools dark colored and offensive, fœtid odor about the body, early and great debility, offensive urine, are evident signs of the predominating typhous element.

We may have a complication in which all the varieties mentioned may enter, and still other modifications, by the appearance of disease in other organs; we may have glandular swellings, disease of the urinary organs, of the skin, eyes and joints, sometimes deformity of a limb follows the disease and been restored.

Anatomical Character - The appearances after death will vary, but certain marks characteristic of the disease will always be found. The

glands of Peyer are nearly always diseased, so much so that it is regarded almost a certain post-mortem test of this disease. No opportunity has yet been offered of examining these glands in the earliest period of this disease. They have been examined in stages after the sixth day, at first the patches are found thickened, and their surfaces elevated about two or three lines above the mucous membrane, the largest are from two or three inches long, and a half to one inch broad, the largest diameter being in the direction of the intestine, some are smaller and more circular, their edges are somewhat ragged and irregular, instead of being smooth and regular. Some are dark red, some pale, and others of an intervening hue, there are also two varieties called hard and soft, the former are hard to the touch, and when cut are found to contain a layer of white or yellowish

firm brittle matter, the cut surface being smooth and shining.

The latter are soft, not so much elevated and have not the whitish layer. As the disease advances, the surface becomes uniformly smooth and soft, the patches vary in number from one to thirty, and the different varieties are sometimes found in the same case.

They appear upon the intestine opposite the mesentery.

They do not all originate at once, but generally occur successively, appearing first near the ileo-cæcal valve, afterwards higher up, even in the jejunum. The hard patches may undergo resolution or ulceration; the soft ones always ulcerate, in the former the matter deposited beneath the mucous membrane, softens first and seperates from its connexions, so that it is thrown off when the mucous coat above it is removed. The surface is found in va-

rious stages of ulceration, but when the process is complete, the whole patch constitutes one ulcer, which sometimes remains of its original size, but sometimes spreads and is stained yellow by the bile. In some cases the muscular coat is the seat of the ulcer, but sometimes it is the peritoneal, when the muscular one is destroyed, and when perforation of the peritoneal coat takes place, a communication with the cavity of the peritoneum is formed. The ulcers have a tendency to heal. Brunner's glands or the solitary mucous follicles of the ileum are also affected in like manner, and are scattered in larger or smaller numbers over the whole circumference of the lower portion of the ileum, and are sometimes found in the colon. It has been asserted, that in some few cases, the solitary glands have been affected, without the patches being diseased, but both are generally more or

less affected.

The mucous membrane of the ileum not occupied by the glands, also exhibits signs of disease, sometimes thickened by sanguineous infiltration, sometimes softened, and sometimes of a white or grayish color, though more generally reddened, and the corresponding mesenteric glands are diseased as often as the mucous follicles, being softened, enlarged and red with traces of pus. The lymphatic glands sometimes become diseased in other places, and are enlarged and reddened, but less frequently and in less degree than those corresponding with the glands of Peyer. This phenomena are characteristic of Typhoid fever. The pharynx is sometimes found either ulcerated, coated with false membrane or infiltrated with pus. The oesophagus may be found as frequently ulcerated, the ulcers generally small and numerous. The gastric mucous

membrane has been found softened, reddened, thinned and ulcerated. The softening though sometimes inflammatory, is not so in most instances. When the duodenum is affected the lesions are similar to those of the stomach.

The colon is generally distended with air, sometimes very greatly so, being the cause of the tympanitic condition, and the isolated mucous follicles are sometimes found diseased like those of the small intestines, and signs of inflammation of the mucous membrane are present; such as redness, softness and ulceration. A diseased condition of the spleen is found in most cases, being enlarged, and is accompanied with a softening to so great an extent, that the fingers can be easily passed through it, and it is changed to dark purplish color.

The liver also is frequently softened

and altered, but no so much as the spleen, but there is no lesion distinctive of the character of the disease. The kidneys, gall bladder and minary passages are rarely affected. They may sometimes exhibit marks of inflammation. The heart is sometimes softened, and the internal coat of the aorta tinged with red, which is caused probably by inbibition.

The brain in a large majority of cases appears healthy, sometimes congestion, inflammation, or serous effusion have been observed, and its substance has exhibited red points when cut. The morbid appearances are quite disproportionate to the symptoms during life.

The blood drawn from persons laboring under this disease, does not seem much altered from a healthy condition, unless there is some inflammatory affection superadded, when the buffy coat will be

exhibited. It is generally less coagulable than in other morbid affections, and there is a deficiency of fibrin.

Causes— After all the investigations into the cause of Enteric fever, the subject is still involved in obscurity, it is evident, nevertheless, that its origin depends upon a variety of circumstances. Any cause likely to depress the vital energies and impair the natural vigors of the body, may give rise to the disease. Bodily fatigue, mental emotions, unwholesome and insufficient food, vitiated air, exhalations from the body, vicissitudes of weather, exposure to heat, cold and dampness, are ranked as causes. It occurs in the healthiest districts, and at all seasons, and frequently as an epidemic, on account of the circumstances under which it has sometimes been produced, it is asserted to be contagious, but the general opinion is to the contrary. It may appear at any time

of life, although it is rarely seen before the age of puberty, or after thirty five years of age. The opinion is held that it does not occur twice in the same person.

Nature – All the facts that have been accumulated and all that has been written in relation to the character of this disease, have not brought us to any reliable conclusion as to its true nature. We have said that many of the phenomena exhibited during the disease, cannot be accounted for by the lesions discovered after death. That the lesion of Peyer's glands which seem to be the only one uniformly present, and is considered characteristic of the affection, is really the primary disease, and the other symptoms presented to our view result from this morbid condition, has not been invariably assented to. The view that it is a gastro-enteritis has not met with favor in consequence of the frequent absence of inflammation of the stomach.

We can understand how the disease will at times seem inflammatory and at others of a low grade. It is sufficiently explained by the recollection of the numerous complications, likely to accompany the disease in the outset, and the variety of accidents to which the patient is exposed during its progress.

Diagnosis – The diseases with which it is likely to be confounded are remittent, bilious and typhus fevers. In enteric fever the attack is slow and insidious, diarrhœa in the beginning or at the early stage, the dullness of intellect, and disinclination to duty, dusky hue of the face, pectoral symptoms, and after the seventh day, dry tongue, sudamina, rose-colored spots, stupor, delirium &c. While in remittent fever we have regular and decided remissions, nausea, bilious vomiting and yellowness of the skin.

Its shorter duration and tendency to assume the in-

remittent-form, and the absence of diarrhoea and tympanitis, expression of the countenance, dusky hue of the skin, stupor and rose-colored spots are sufficient to distinguish it. From accidental causes the remittent fever is sometimes prolonged and assumes the typhoid form, then the diagnosis becomes difficult, but the history and a close investigation of the case will detect the characteristic symptoms, and enable the practitioner to determine the nature of the complaint. The prominent features in which it differs from typhus fever are a greater disturbance of the nervous system in the latter, the stupor is earlier and greater, deafness more severe, spasmodic tremors more frequent, the eruption is more general and abundent, of a darker appearance and not always if at all disappearing upon pressure, as in Enteric fever, in absence of the tympanitic distention and diarrhoea, and instead constipation, the heat-

of the skin more pungent, and the odor of the body more offensive. The thoracic signs are those of congestion of the lungs, whilst in Typhoid fever we have those of a bronchial character. The duration of Typhus is usually less and death takes place earlier. The post-mortem appearances are different. The lesion of Peyer's glands is not found in Typhus fever, whilst congestion of the lungs and brain are seen in it, and are wanting in Typhoid fever. It attacks old age frequently, and is more frequently epidemic and is considered contagious. These differences are certainly sufficient to distinguish the diseases.

Prognosis— Typhoid fever as it occurs in this country though a serious, is not a very fatal disease, it however often occurs with different degrees of violence in different cases, it is generally more fatal in hospitals than in private practice, some epidemics of

this fever are very mild, while others are very severe and fatal, the grade of the epidemic differs in different seasons. But we should not give an unfavorable opinion on account of great prostration or debility. There is no condition so low, no symptoms so serious, that death is certain, the most dangerous is probably that in which ulceration of the intestines has occured, but even this is not always fatal, the effused contents of the bowels may be confined by extravasated fibrin and the intestinal opening closed, or a curable abscess pointing externally may take the place of diffused and fatal peritonitis. No case however slight can be looked upon as absolutely free from danger, for even in the mildest cases perforation of the bowels is liable to occur, our opinion should be given with caution. Complete delirium of long continuance, carlessness or a want of a sense of danger, profound coma, stertorous respiration, excessive subsultus, or epileptic spasms,

rigidity of limbs and eyelids, profuse diarrhoea, hemorrhage from the bowels, involuntary discharges, great prostration, extreme frequency and fulness of the pulse, coldness and clamminess of the skin, excessive sweating, and very great distention of the abdomen are unfavorable signs, yet patients have recovered when these symptoms have been present. Diminished frequency of the pulse and heat of the skin, return of consciousness and interest in the surrounding objects, a restoration of healthy secretion, and a disposition in the tongue to become moist and clean, will justify a favorable prognosis. Yet we should be cautious when the symptoms are declining, for sometimes some local complication still existing, a new train of symptoms are set up, and the patient dies from a disorder that at first was not so prominent as to require much attention.

Treatment. It should be remembered

that the disease has a tendency to run a certain course, therefore any officious intermeddling with remedial agents will not only be useless, but dangerous. It should be our duty to husband the patients strength. If diarrhoea should not be present at the beginning of the disease, it should be recollected that there is a tendency to disturbance of the bowels, and although it may be necessary to remove any accumulated secretions, it should be done with the mildest purgatives. But if free, no laxative medicine should be given, Castor oil or rhubarb and bicarbonate of Soda are the most suitable. On the other hand after a free evacuation, should the bowels not remain sufficiently free, the same remedies may be repeated or changed to a Seidlitz powder. If nausea or vomiting is present, it would be advisable not to run the risk of aggravating the condition by medicines but administer enemata of warm water to accomplish the pur-

pose.

The febrile symptoms should next receive our attention. If local inflammations exist they should be combatted with suitable remedies. The head, chest and abdomen should be looked to and if there is evidences of congestion or inflammation, cupping or leeching should be applied, but we should be cautious in their use, general bleeding is seldom admissible, refrigerant diaphoretics will be necessary. The citrate of Potash will answer very well, to which can be added spirits of nitric Ether when there are nervous symptoms. The bi-carbonate of Soda and chlorate of Potash in combination, will also prove useful.

Cold applications to the head when there is much heat are required, also to the body when the surface is hot, whiskey and water, or vinegar and water are very proper applications, ice to the head in bladders, cold

drinks may be allowed, iced water, ice in the mouth if the patient wish it. For pains in the abdomen, some rubefacient, such as mustard will be serviceable, sometimes a blister will be necessary when there is much tenderness, and flannel cloths wrung out of hot water or spirit can also be used with comfort to the patient. Should the bowels be too free, they should be checked by using some astringent, acetate of lead and opium and ipecacuanah, tincture of kino or catechu, extract of rhatany, tannic acid, or chalk emulsion can be used. sweet spirits of nitre and Hoffman's anodyne, to quiet the nervous symptoms, such as restlessness, wakefulness and and general uneasiness, Morphia, Opium, Hyoscianus or Camphor may be given when not contraindicated by cerebral congestion. In the mild form of the disease no other treatment will be found necessary.

But very often a condition of things super-

venes which indicates a deficiency of vital action, the secretions are altered and deficient, the tongue and skin are dry, and the urine scanty, the pulse is accelerated and more full, more delirium or stupor, and the abdomen becomes tympanitic. Under these circumstances, mercury given so as to slightly affect the gums, is of great benefit, it is indicated by the general failure of the secretions, and general languor of the vital functions, it is also indicated as an antiphlogistic remedy. But extreme caution should be observed not to produce salivation, as the depressing effect might be very serious, blue mass is the most suitable form, and when the stomach will bear it, the addition of ipecacuanah will benefit the bronchial trouble and relax the skin. The agency of mercury will now be realized in its action as an antiphlogistic, where inflammation of some important organ is threatened, general bleeding being out of the question, although the local abstraction of

blood by cupping or leeches may be borne, and it may serve to arrest the progress of the disease in the glands of Peyer, and to promote resolution of the inflammed patches. The refrigerants may be omitted or continued, as the condition of the case shall indicate. The most salutary results sometimes follow from this course and the patient proceeds to convalescence.

But if the disease should continue without any abatement of the symptoms, the oil of turpentine will be of much benefit; its employment is highly recommended in all cases of this disease, in the advanced stages, when the tongue is dry and the pulse not strong and the abdomen much distended. In recording the symptoms, it was stated that in this period of the disease, the tongue instead of cleaning gradually from the tip and edges, often parts with its fur quickly, and in large flakes, generally first from the middle or back of the surface

which is left smooth and glossy, as if deprived of its papillæ.

It often happens that the tongue ceases to clean and becomes dry and brownish, or after its completion this change takes place. At the same time there is generally an increase of the tympanites, and an aggravation, or certainly no abatement of the other symptoms; such cases have terminated fatally. This remedy is supposed to act, in consequence of the benefits derived from its use in ulcerations of the intestines, it being known that such a condition exists in this fever, and it has been employed with great success. It should be given in doses from five to twenty drops every hour or two, and is best given in emulsion with gum arabic, loaf sugar and water, a little laudanum being occasionally added, if it disturbs the stomach or bowels. In the course of twenty four hours or forty eight at most some amelioration of symptoms will be observed.

The condition of the tongue improves, growing

moister and covering itself with a whitish fur, the tympanitic distension diminishes, or is not increased, the pulse becomes less frequent, and the skin less dry and harsh, and convalescence gradually appears, sometimes without any other remedy. As the case improves the quantity of oil should be diminished, but not laid aside too suddenly. The same course of treatment may be pursued with the same certainty of success when patients are found in this condition, when the physician is first called.

Tonics and stimulants are often useful in the advanced stage, on account of debility, sometimes early after the commencement of the disease; but more frequently not until sometime in the second or third week. The practitioner must be influenced by the state of the pulse and skin, and the general evidence of a typhus condition of the symptoms, when the pulse is slow and feeble, the skin cool, and the tongue and teeth covered

with sordes, there is no doubt as to the propriety of using stimulants, and the happiest effects are sometimes derived from them under these circumstances. But it more frequently happens that the pulse is very frequent, while it is weak, and the skin is at least partially hot, and even under these circumstances they are often required.

Should the symptoms be aggravated instead of moderated, by the careful use of these remedies, they must be omitted, but on the contrary the propriety of their employment will be indicated by an improvement of the patients condition. They should be first used in the mildest form, the infusion of Serpentaria, with a little sweet spirit of nitre may be tried, and may be continued if it agrees with the stomach, the preparations of bark are sometimes useful, but not so much so as in remittent and proper typhus fevers, the compound infusion or sulphate of Cinnia may be used, and

combined with Terpentina, sulphate of Quinia may sometimes be combined with advantage with oil of Turpentine and given frequently in moderate doses, if the stomach will bear it. Its abortive quality although lauded by some, seems to be pretty generally doubted

Wine whey and Carb. of ammonia may be given when a more diffusible impression is indicated, from five to ten grains in emulsion every hour or two according to circumstances, in many cases pure wine and brandy may be given. In sudden and great prostration, sulphuric Ether may be given. Opium is of much benefit in this complaint when no cerebral disease exists, in the latter stages it proves useful by its stimulant power, it also relieves nervous disorder, producing sleep, checking diarrhoea, and causing perspiration, you may give from a half to a grain every four, six or eight hours, if it increases delirium or stupor its use should be stopped.

When coldness of the skin and debility occur together, powerful rubefacients should be used in connexion with the internal stimulants, hot oil of Turpentine, Cayenne pepper heated in brandy, or a solution of Ammonia properly diluted, may be rubbed upon the surface of the body, particularly upon the extremities, sinapisms may be applied to the extremities and blisters of Spanish flies to the inside of the thighs, or to the trunk, care must be taken not to leave them on longer than is necessary to produce a rubefacient action. There is danger of sloughing from too free use of stimulants to the surface of the body, which must be guarded against in this disease. The temperature of the surface must be kept up by artificial heat, as hot bricks bottles of hot water. &c.

The various local symptoms or incidental complications in the latter stages demand attention. In obstinate delirium or coma, great benefit may be derived

from shaving the scalp, and applying a blister over the whole surface, but this should not be delayed too long.

When there is great exhaustion, nervous restlessness and jactitation, the anti-spasmodics, such as Musk, Assafoetida and Camphor are required. For arresting hemorrhage from the bowels acetate of Lead, Kino, extract of Rhatany with Opium, may be given with benefit. It will sometimes be necessary to plug the nostrils in epistaxis.

The local use of the tincture of Iodine or Nitrate of Silver in erysipelas will be judicious. When there is peritonitis resulting from perforation of the intestines, the best remedy is large doses of Opium, the perfect quietude of the patient is necessary and the avoidence of everything internally likely to disturb the bowels. If there be retention of the urine, it will be sometimes necessary to draw it off with a catheter. Sloughs from pressure or bed sores, may be prevented by frequently changing the posture of the

patient and using pads or pillows where parts are much exposed to pressure.

The condition of the atmosphere in the sick room should always demand attention. In this disease particularly so. Pure air should be constantly admitted, and means should be adopted to preserve it pure, by removing immediately everything likely to contaminate it. Cleanliness of the person and linen is also necessary, when there are a large number confined in the same apartment, the chlorides are very serviceable. Vinegar may also be sprinkled about the bedding and room.

It now only remains name a proper dietetic plan to be followed during the treatment of the disease. In the earlier stages the blandest and lightest articles should be administered, and that in the fluid form. Gum water, flaxseed tea, barley water, rice water, toast water,

tapioca, sago, arrow root, and the like, prepared as drinks.

Orange and Lemon juice, and the juices of fruits generally, prepared as drinks together with water, may be given cold, or any of the drinks above mentioned may be flavored with the juice of the fruits. Something more nutritious will be required in the advanced stages when great debility exists, arrow root, sago and rice, and all farinaceous articles properly prepared in the form of jelly, and flavored with spice and sugar, may be allowed, but cautiously; repletion must be avoided. And should extreme prostration ensue, animal broths must be resorted to, and a little brandy or wine may be given in carbonated water. The treatment now both as to medicine and diet may be required to be of the more supporting and stimulating kind.

But every case must be treated according to the urgency of the symptoms.

During convalescence the patient is still an

object of solicitude to the physician. Upon his release after a long confinement, from a slow and insidious disease, he is pretty apt to be imprudent either in his diet or exposure of his person. For the debility that now exists, accompanied with or without night sweats, any of the vegetable tonics, or mineral acids will be found sufficient. The constipation that ensues may be removed by some mild laxative or enemata of warm water. Quinine may sometimes be required when there is any thing like febrile paroxysms. The diet during this period should be mild, easily digested and nutritious. Great care should be taken not to oppress the stomach. Exercise should be adapted to the condition of the patient, and a gradual return to his usual habits and occupation insisted upon.

An

Inaugural Dissertation

On

Coxalgia

Submitted to the Examination

of the

Provost, Regents, & Faculty of Physic

of the University of Maryland

for the degree of

Doctor of Medicine

By

Benj Bonneville Miles

of

Maryland

MDCCCLXI

Coxalgia

Gentleman I am about to perform my last duty as a student in the University of Maryland; that is in writing a thesis to be submitted to your criticism. I hope Gentleman you will excuse all my ideas for although I do not wish to make my case take the most prominent features, still I intend to make it bear its symptoms and its treatment but own to my subject. This disease above all others and in our white list of surgery has caused more lameness more unhappiness than any two diseases that are known and even it may be ranked ahead of the results of our great battles. This diseas in its complaints are very analogous in its nature to white swelling. It may be of an acute, subacute or a chronic character and it is most commonly occurs in strumous subjects. I think it connection with scrofula is generally

more distinctly marked than any other
The complaint is most frequently seen in
children, but no age, no sex, no rank, nor
condition of life is exempt from it.
The approach of the disease of the hip joint
is much more slow than that of white swelling
It commonly comes on from very slight causes,
over-exertion, a sprain, a fall, or sitting in the
wet; but a sprain is usually the circumstance
to which its occurence is attributed to. These
symptoms are very often not sufficiently urgent
to excite much notice; for in my case it run
on for some months before I applied to a Dr.,
and when observed by the practitioners are neither
understood nor treated according to surgery.
My case was diagnos rheumatism and treat
ed for such for about a year, and because
there was an uneasiness in the knee my
hip which was the affected part was over
looked and this is frequently the case
with practitioners. We find the hip
joint composed of three distinct parts

the soft structures; the acetabulum, and the head of the femur, and any of these may be affected. And it is therefore divided into three distinct forms. Before proceeding to describe each these forms, we may consider briefly the pathological conditions which are more or less common to each variety Viz pain, suppuration, dislocation, and anchylosis, 1st Pain in my case commenced very slight and was only now & then, but it afterward became severe and constant, night and day, It resembles the pain of rheumatism since it has a particular seat, (for I have suffered from both) As it advanced the pain became severe more so at night, and I was continually roused from my sleep by the painful starting of the limb and in the chronic form for my case turned out to be such the symptoms are very much the same 2ond Suppuration is not a necessary consequence, although in strumous subject it more commonly occurs than not

Thad what might be called a femoral abscess occuring over the neck of the femur the surrounding parts became tense & extremely painful; the skin reddish and symptoms of inflammatory fever prevail. Then after the pain swelling occurs around the joint and pointing quickly follows I found at this stage that there was more starting in my limb. After my abscess had busted I found that my limb became shorter & the pain increased with spasms of the muscles and the limb became smaller in every way the leg seemed to be bent a little forward It was at this time that my whole system became excited. I was then so much worst that I called in another Dr and under him I began to improve.

"3rd Dislocation this form of the disease commences in the advanced stage of hip disease. Dislocation of the head of the femur commonly occurs from three

causes 1st the destruction of the joint
the capsular ligament having given way
by softening & ulceration. 2nd Caries and
partial absorption of the head of the femur
3rd A fungous fibro-plastic mass may
spout up from the bottom of the cavity
and push the bone out.
4th This is the last of our divisions
and which we have left undescribed
Anchylosis may occur either with or with
out suppuration If the joint has sup-
purated and the head of the bone is thrown
on the dorsum Ilii, a false joint may
form or anchylosis more or less will take
place and this sometimes occur with
but little shortening of the limb Still
I beleive this form more frequently com-
mences in the cartilage incrusting the
head of the bone Mr Ford was perhaps
the only one throwing light on this point
In one case there was a teaspoonful of
matter in the cavity of the hip joint

the head of the thigh bone, was somewhat
inflamed the capsule ligament thick-
ened the cartilage lining the cotyloid
cavity was eroded in one place, through
which a probe mite be passed. In this
form of the disease the patient is seized
with signs of acute inflammation of the
joint, with great constitutional distur-
bance. The pain in the joint in these cases
is of the most excruciating character
accompanied by spasms and twitchings
of the limb. The suffering is intense that
the patient can not bear the slightest
movement of the limb; a fit of coughing
the weight of the bed clothes, or the shak-
ing of the bed by a person leaning against
it, will give rise to the most intense
agony; in these cases the limb is everted
abducted, perfectly helpless, motionless;
the nates will be found flattened,
and there is some fulness about the
joint. There is also sometimes true

elongation, in consequence of the capsule becoming distended with fluid. On measuring the limb in order to ascertain its true length. It is necessary to examine the two together, and to place the sound one in exactly the same position as the diseased one. unless this be done, error will very probable creep in for the practitioner who first had my case, and who measured it said, there were no shortning when there were, this was all owing to him not measuring both legs. In some cases the distension of the capsule with synovial fluid as the result of the inflamation in the joint, may be so great as to lead to it rupture, with great pain & much shortening; this however very rarely occures. In this, the acute form, various terminations may take place: the result depending upon the constitution of the patient, and the manner in which it is treated. In some cases it is long in other it is of a short-

time before the patient can use his limb. In the acetabular form, the first symptoms is often abscess in the iliac fossa, with pain around the hip, and it is tender on pressure, the patient can not bear on the limb, and he soon gets into the habit of bearing the weight of his body chiefly upon the opposite limb while the thigh of the affected side is bent forward, and the ground only partially touch with the foot; It also becomes greatly wasted. And this is considered to be the most fatal forms of hip-disease.

In the Femoral form of Coxalgia, the disease usually commences in a very treacherous manner. The first symptoms are, that the child walks in a peculiar, hopping manner he does not stand firmly upon both feet but rest upon the toe of the affected one, the knee of which is bent. On examining the condition of the limb it will be found to be abducted, slightly flexed upon the thigh,

with the knee partly [illegible] appears [illegible]
shorter than the other, but not real, for
on lying the child on his back, it will be
shown that there is no alteration in its length
In the obliquity of the pelvis is owing to
the child lifting the foot off the ground in
order to avoid pressing on it in walking or run-
ning. This apparent shortening will give
place after keeping the child in bed for a
few day to a simulated elongation of the
limb. At the same time the child complains
of pain in the joint; you will also find ab-
duction and rotation very painful. At this
stage of the disease the patient will often
refer to the knee as the seat of pain, and a
careless surgeon might be misled and treat
the wrong joint. It has been said by some
that this pain is seated in the obturator
nerve, the articular branch of which sent
to the hip-joint becoming implicated. On
turning the child upon its face it will
be observed that the [illegible] are somewhat

flattened. As the disease at [illegible] abscesses may form at any part in the vicinity of the joint. They mostly occur under the glutei muscles. When in this situation they give rise to very severe suffering down the inner side of the thigh by pressure upon the obturator nerve. It is about this period that shortening takes place. After the formation of abscesses, the health which may up to this time have kept pretty good speedily give way. In making the diagnosis of [illegible], care must be taken not to confound it in its early stages with an ordinary attack of rheumatism (as I have known it to be done) a mistake that not unfrequently happens. The alteration of the folds of the nates and shape, obliquity of posture [illegible] limb the limitation of the pain to one joint will usually prevent the surgeon fallen into error. With disease of the knee care must be taken not

to confound hip disease in consequence of the pain in the early stages being commonly referred to that joint; here the absence of any positive sign of disease about the knee and the existence of all the signs of disease in the hip that have already been noticed will enable the surgeon to diagnose the true seat of the disease. In my case there was lateral curvature of the spine accompanied by neuralgic tenderness in the hip occasionally gives rise to apparent shortening of the limb with pain which made the Dr. make the wrong diagnose. But with rigidity in these cases the existence of the spinal affection, the superficial nature of the pain, and the absence of increase of suffering when the joint is firmly compressed or of painful startings at night will indicate the true nature of the affection. Abscess may occasionally though rarely form in the vicinity of the hip

without that joint being diseased. Should this take place towards the anterior aspect of the articulation under the pectineus muscles it may by this pressure upon the obturator nerve is affected; here however the sound state of the joint at its posterior & outer part, the absence of all obliquity of the pelvis & of the other signs of the true hip disease will enable the diagnosis to be affected. The treatment of the disease of the hip must be conducted with reference to the form of the disease, the acuteness of the attack, & the severity of the local & constitutional symptoms. In all cases this affection must be managed in accordance with those general principles that guide us in the treatment of inflamed joint. When the disease is of acute kind and even at the commencement of any form of coxalgia it should be put into a splint and the one that I would recommend would be the Anterior splint

It is in many ways better adapted for the treatment, on account of its fitness and in summer for its coolness. Also the patient should take Calomel & Opium pretty freely administered. The inflamed joint should be leached or if the patient can bear it cupping glasses may be applied behind the trochanter, and great relief will be afforded also by the application of hot pippy formulations. The splint should not be used till after the inflammatory action has been somewhat subdued, the joint may also be conveniently fixed by means of a starch bandage.

When the disease has fallen into a somewhat cronic condition or from the very first of the subacute or femoral variety a different & less active line of treatment is required. In this case rest and perfect immobility by means of the anterior splint or starch bandage are indispensable in conjunction with the employ-

ment of counter irritants [illegible] particularly the caustic issue and [illegible] blisters At the same time a course of moderate alterratives and tonics conjoined will be found most advantageous. During the whole of the treatment the general health requires careful supervision. The diet must be attended to and should be as nutritious as possible, the state of the bowels should be regulated, the skin kept in good action with a flesh brush; and the patient apartment should be well ventilated. As the health improves a change to the sea side or to the springs will be of great advantage. As abscesses form they should be opened early, if dislocation has taken place, and the limb is consequently becomes a good deal shortened, the patient should be placed under the influence of [illegible] bringing down the limb and fixing it in a splint (The Anterior

be by lesser may thus be brought in a good position. It is a question wheath or an attempt at reduction should be made in these cases of dislocation, as it very rarely successful. The acetabulum being either filled up with fibrous matter or the head of the bone is so diseased and lessened in size that it would not remain in its cavity when put there. Occasionally however the reduction may be successfully effected. If anchylosis is likely to occur, the surgeon must endeavor to secure it with the limb in easy position. Excision of the head of the femur has of late years been much discussed. This subject has had more attention directed to it by the writings of Ferguson, Walton and H. Smith.

A

Report of Cases

Submitted to the examination

of The

Provost, Regent and Faculty of Physic

of the

University of Maryland

for the

Degree of

Doctor of Medecine

By

Edward Wootton.

1861.

Case. 1st

Hepatic abscess.

Robert a colored boy. aged 16 Native of Virginia, occupation farm hand admitted to Infirmary Aug 20th 1866. His previous history is imperfect. He states that about four weeks ago he was seized with Chills and Fevers which were treated with the usual remedies, about a week ago he first felt slight pain beneath the margin of his ribs which was aggravated by the least pressure. He went on however with his usual work until it increased so much that he came to the Infirmary for treatment. When admitted he presented the following phenomena: Conjunctiva tinged with a yellow hue. Liver protrudes from beneath

ribs and sensibly increased in size.
His bowels were relaxed and stools clay-
colored and watery. Dr Chew saw him
and orders following treatment.

℞ Mass Hydrarg grs. xxiv.
Pulv Ipecac grs. vi
Sodae Bi-Carb ℥j. ft Cht xii.

S. one every 4 hrs -
Low diet was directed and bowels to be
restrained with Chalk mixture and Tr Catechu.
Aug 26th His Liver has greatly increased in
size and slight fluctuation can be
felt in right hypochondriac region.
The yellow hue of conjunctiva has disap-
peared and stools are more natural
in appearance. Dr Chew stopped the
Mass Hydrarg and gave Sinnine Sulf, gr ii

every 2 hrs. The part to be rubbed with the Ung Iodinii Comp.

Sept 4th A large tumor has formed where the fluctuation was first felt. It fluctuates freely, is pyriform and so situated that it is impossible to say whether it is a distended gall-bladder or Hepatic abscess.

A poultice was directed to be constantly applied.

Sept 10th Patient about same. Early in the morning there is a puffiness about his face which soon disappears.

The tumour is too diffused and soft to leave any doubt as to its being an Hepatic abscess. The absence of oedema about the part and the complexion

of patient rendering it ~~rendering it~~ impossible to discover the red blush over surface leaves a doubt as to whether adhesion has taken place between the parietes of Abdomen & Liver. Dr Chew consequently refused to interfere preferring, rather to leave the case in the hands of nature than be, perhaps, the cause of the Patient's immediate death Sept 21st The abscess opened this morning, when more than a quart of Pus issued mixed with a sanious fluid. A probe being cautiously introduced, for fear of disturbing the adhesions, passed more than two inches into the substance of the Liver revealing a cavity of large size. He was put on

Ferri Prot-Carb gr. V 3 times daily also
Syr Sarzae Comp ℥i ter die.
Sept 22nd The opening of abscess having
clogged up it was opened with the
lancet to facilitate discharge of Pus,
when a considerable quantity again
gushed out.
Sept 23rd Pus of same character is
still oozing. The quantity is small.
The walls of abdomen have contracted
and the size of Liver greatly reduced.
Sept 25th The patient is improving
in general health which had been
somewhat impaired. His liver is
nearly of natural size and gives
him no uneasiness. He is now
walking about the wards without

any troublesome symptoms.
Oct 1st Robert will go out in open
days. He is seemingly quite well and
has no pain nor uneasiness in the region
of his Liver —

Case 11nd

Jacob Quurfelt. a german resident of Baltimore, Aetat 46 - admitted Jan 10th laboring under acute articular Rheumatism. He states that about a week ago he spent a day in the country where he was unusually exposed to a cold and damp atmosphere. The next morning he experienced severe pain in his left shoulder which extended in a short time to the right and subsequently to his arms & legs. When he came in he was suffering so dreadfully that he screamed out on the slightest movement and was entirely unable to sleep. He said that he had been treated with Mercury Dr Butler, the Resident Physician

saw him and ordered Potass Bi-Carb gr xx every 4 hrs, also Pulv Ipecac Comp gr x with Pulv Opii gr i at night to be followed by dose of Morphia if sleep was not produced. The Morphia was given about 9 o'clock at night.

June 11th Slept tolerably well last night and is better this morning; He complains less of pain and says that he feels much more comfortable. The same treatment was continued.

June 12th Slept well last night. He is now sitting up in bed for a little while. The opiate at night was discontinued.

June 14th Sleeps very well at night. He went down in the yard to-day without

assistance.

16th He complained more yesterday than he did the day previous. Now, however, he only has pain in his shoulder.

He is walking about and doing well.

June 20th Left the Infirmary to-day quite well. Sleeps well at night and complains of no pain whatever.

Case 111th

Patrick Dolan æt 25. Native of Ireland occupation Quarryman. admitted evening of aug 20th 1860. His history as given by himself and confirmed by his friends is as follows. On the morning of the 14th he was taken with Diarrhoea which was unusually violent the number of operations amounting to 20 or 30 at first large but afterwards small and accompanied with straining. In the evening the symptoms of dysentery began to appear - great straining and pain with bloody stools mixed with mucus and slime.
On the next day the straining and pain became greater and the number of stools amounted to over one hundred

in the 24 hours. He passed nothing but mucus and slime which was exceedingly acrid and excoriating. The same number of stools and same kind of operations continued till he was admitted to Infirmary. When he came in he was very weak and emaciated - tongue covered with whitish fur and slightly ridged, with a weak and frequent pulse. There is great pain on pressure over whole course of ascending colon and lower part of abdomen.

The desire to evacuate the bowels is incessant - so that - he has hardly time to reach his bed before

he is called to stool.
Dr Chew ordered
℞ Mass Hydrarg ℈i
Pulv Ipecac
Pul. F Opii aa grs v
Cretae ppt ℈ij.
Mx ft Cht x. Signa. one every 3 hrs.
to be followed at night by injection of
℞ Plumbi acetas grs xii
F Opii gtt. xxx
Starch water ℥ij –
one grain of opium was also directed
at night.
Aug 21st Did not sleep much. Had about
20 passages. Says that he feels better.
The injections were ordered 3 times daily
and cups to be applied over course of Colon

Aug 22nd He had about 10 passages last night. His pulse is stronger and he says that he feels decidedly better.
Evening 6. o'clock. Has had 8 operations during the day. They are still tinged with blood but more consistent and more natural in appearance. He has but little straining when he goes to stool and the pain is relieved immediately after operation. Only one injection was given to-day.
Aug 23rd Slept better last night. He had 5 passages. The pressure over ascending Colon produces no pain and but little is experienced over lower part of Abdomen. His tongue is covered with small, white flakes of fur at base and in the centre, whilst the tip and edges

are red and indented.

Aug 25th He is still improving. He has about 4 passages in the 24 hrs. There is no blood passed but still some straining.

Aug 27th He hardly presents any symptoms of dysentery. The straining has entirely gone and he has no pain. He sleeps well at night. All medical treatment was discontinued but he was still directed to be careful in his diet.

Aug 29th Was dismissed to-day perfectly cured.

Case IV.

Mrs Rink: aetat 40: native of Baltimore. admitted into Infirmary Aug 24th 1860.

She states that she has been sick five months. Was first taken with weakness and pain down the legs so that she was not able to walk any distance. Her ankles began to swell first but the swelling gradually extended into other parts until 4th of July when she had great difficulty of breathing and complained of great sickness. She had not been exposed to the cold or wet or any cause to account for development of disease She states that her urine was neither increased nor diminished in quantity.

Her complexion is anemic and face bloated.
When admitted she had ascites with general anasarca. She is very drowsy with good deal of dyspnoea. Her urine is very small in quantity ranging from 12-16 ozs in the 24 hrs. high colored and smoky in hue with S.G. 1006. 21 is loaded with albumen and under the microscope are discovered tube-casts with fat-cells and free oil also epithelium from kidney. The first sound of the heart is entirely absent whilst jugular veins are turgid and pulsating. She states that she has menstruated regularly. Her bowels are obstinately costive.

Dr Chew ordered

℞ Pulv Digitalis

Pulv Scillae ana gr. i. ft pll

Done ter die. also when bowels are not moved

℞ Pot. Bi-Tart ℥i

Aquae Ebull Oi to be used as drink.

Aug 25th Quantity of urine not increased: bowels not moved. She complains of great sickness at the stomach.

Aug 26th Bowels moved once. operation small and natural.

Aug 28th The swelling is gradually increasing. Bowels still constipated.

Ol. Ricini ℥ij was ordered to be given

every 2 hrs until it operated freely.
Aug 29th after repeated doses of the oil free purgation was produced. She feels now much better and the swelling of abdomen has subsided.
Sept 3rd Has been about same.
The swelling is again increasing. The bowels are still constipated and not moved unless acted on by purges —
The following treatment was relied on.

℞ Mag Sulph ℥j
Potass Bi-Tart ℥ß
Aquae ℥viij. ft Mist

Signa wineglassful until it operates freely.
Sept 6th the medecine above ordered makes her very sick at the stomach and it was obliged to be discontinued.

It had the effect of producing liquid stools but the swelling has not gone down to any considerable extent. Following was given -

℞ Jalap grs v

Potass Bi-Tart grs x

Pulv Cinnamomi gr i, ft pill i

one to be taken every 4 hrs -

Sept 10th Not much improvement under treatment. Swelling much greater though there is less constipation and sleep is almost impossible.

Pulv Ipecac Comp grs x was ordered to be given at night.

Sept 15th the swelling has increased so much that her respiration has become greatly impeded

Every kind of diuretic has been tried without producing any permanent good effect. It was decided merely to make an incision in lower part of leg in order to lessen the effusion. One consequently an inch in extent was made above inner malleolus. At least six to eight quarts of water were drawn through this opening. The compound infusion of Scoparius was then given with gin. The kidneys immediately began to act more vigorously and the quantity of urine was rapidly increased. This effect was no doubt due as much to the pressure being removed from the kidneys as from the effect of the

medicine

Sept 27th She has very much improved. The ascites has nearly disappeared and her face which was enormously swollen has assumed its natural appearance. Her arms were swollen to twice their natural size but are now nearly of natural dimensions. The first sound of the heart can also be distinctly heard and there is no pulsation in jugular veins. An erysipelatous inflammation has set in about the incision extending up the leg nearly to knee joint.

Sept 28th The swelling is gradually decreasing although the opening in

her ankle is kept constantly open.
There is not however as much
water discharged as formerly, the pul-
sation of the heart has again become
imperceptible and the jugular veins
are turgid and pulsating as before.
Oct 6th The effusion into cellular tissue
has become so great that an opening
was made in other ankle. There is
now a constant draining going on
from both ankles and the amount
of urine passed is above its normal
quantity.
Oct 8th Patient died this morning. Her
respiration was impeded from amount of
swelling which has again become enor-
notwithstanding the above measures

for her relief. Her mind seemed to have been affected for the last few days. No Post-mortem could be obtained so that the changes in the kidneys could not be observed.

Case V.

Renal Dropsy

Wm Butler colored. aged 36. native of Prince-George Co. Md. occupation farm-hand. admitted to Infirmary April 5th 1860 laboring under dropsical effusion.

According to his statement he was taken with a swelling of lower eyelids and face about the 18th Dec 1859 whilst engaged in digging a grave where he was exposed to a cold and damp atmosphere. He went on with his work however until the 24th of Dec when being more than ordinarily exposed he was taken with a chill and obliged to go to bed. The swelling had gradually extended to his scrotum, lower limbs

and abdomen. He was treated by an intelligent Physician in the neighborhood and in a short time was nearly relieved.

On the 8th of January he was engaged in cutting ice when the swelling again made its appearance but he did not go to bed for two weeks afterwards. Having failed to obtain relief he was admitted to Infirmary presenting all the phenomena of a well marked case of Renal Dropsy. His urine was of a dusky blue color. The application of heat with Nitric acid gave an abundant precipitate of albumen nearly rendering it solid.

Its Sp. G. was 1010. He told us that he was frequently drowsy and often was compelled to yield to its influence. Dr Chew saw him and ordered

℞ Mass Hydrarg grs xvi
Pulv Scillae
Pulv Digitalis āā grs viii

ft pills viii. & one 4 times a day
Also wineglass of Infus Scoparii 3 times daily.

Apr 6th Says that he feels better. Passed in 24 hrs ℥ xxv. Sp. G. 1018 with considerable albumen present.

Apr 7th Urine more natural in appearance amount passed 8v. Sp. G. 1014 with nearly as much albumen present. He still complains of drowsiness. The swelling

The swelling however has subsided and he feels better.

8th Passed 3ij urine Sp. G. 1012. with abundant albumen. There is greater distension of abdomen than on previous day.

Apr 10th Quantity of urine passed one day 3xix Sp. G. 1014. The swelling has not been reduced and he complains frequently of headache and cold feet. His legs are oedematous. The following was given

℞ Potass Bi-Tart- ℥ij
Magnesia Sulph ℥ij
Aquae ℥viij —

Sigma 2 tablespoonfuls every 2 or 3 hrs till free purgation.

Apr 12th 5 or 6 liquid evacuations have

been produced. His abdomen is less swollen and he says that he feels better. The amount of urine passed was about ~~was~~ f℥xxvii Sp G 1014 with abundant precipitate of albumen. Apr 13th Passed f℥xxvi. Sp G. 1014. Stopped the pills of Mass Hydrarg & gave

Syr Ferri Iodidi gtt xx after each meal. The Infus Scoparii was continued. He sleeps well at night but is still drowsy during the day Apr 16. He says that he feels better. He is no longer drowsy during the day and his legs are not so oedematous. The puffiness has also considerably diminished. He passed during the day f℥xc Sp G. 1010. He complains frequently of

- 1

headache which generally comes on during the evening.
Apr 18th Slept well last night. He passed Fly C X urine Sp G 1008 with considerably less albumen present. The swelling in his legs and abdomen has sensibly diminished. His bowels have been constantly freely moved by the solution of Potass and Mag. His urine is now of a more natural colour although paler than usual.
21st Has felt very well during last few days. His legs are of their natural size and there is hardly a perceptible distension of abdomen. He has now no headache nor drowsiness.

He passes about f℥ 2 x urine Sp G. 1008
Apr 28th During past week Butler has been seemingly quite well. He has no headache nor drowsiness and no swelling in legs or abdomen. The quantity of urine passed is nearly natural.
Apr 30th Tested Sp G of urine when uranometer stood to nearly 1000. There was no sign of albumen discoverable. He says that he feels perfectly well. Dr Chew ordered the Infusion of Scoparium to be stopped & to be resumed however when the least swelling was observed.
May 17th Butler went out to-day. On the test of nitric acid & heat no albumen could be detected. The quantity passed is natural ——

Case VI.

Hemiplegia.

Jacob Forward; aged 65. occupation farmer, native of Maryland, admitted into the Infirmary Aug 16th 1860.

According to his statement, about nineteen months since he was taken suddenly, whilst sitting in his chair with loss of consciousness which caused him to fall insensibly to the floor. He had had previously neither pain in the head nor giddiness. The loss of consciousness continued, however, for some hours when he slowly recovered. When he recovered he found that his left side was completely paralyzed. He was unable to walk and when admitted presented all

The characteristic symptoms of hemiplegia, such as the following viz: very slight rigidity and paralysis of right side: perfect rigidity of muscles of left side; biceps resisting extension; left pupil contracted; mouth slightly drawn to right side; deviation of tongue to left when protruded; left thumb drawn into palm; reflex action on tickling left foot; violent Spasmodic Twitching of muscles particularly of left side; galvanism affecting chiefly muscles of left side - muscles of paralyzed side not becoming rigid till extension is attempted when the instant it becomes so - heat of surface greater on left side; Pulse extremely feeble and bounding

costive. Dr Chew saw him and ordered following treatment:
Potass Iodid: grs v. to be taken ter die & bowels to be kept open by compound Cathartic pills.
Aug 20th No very great change perceptible; the muscles of right side are becoming more rigid and evidences of paralysis of that side are increasing.
Sept 5th Gradually sinking; the right side is nearly as much affected as left. A seton was placed in back of neck.
Sept 11th Cannot move himself at all; his water has to be drawn off with a catheter. The Potass. Iodid was discontinued and he was put on Mass Hydrarg: grs ii, every 2 hrs.

Sept 15th Died today having been [illegible] from date of entrance. An autopsy two hours after death revealed the following anatomical changes: on taking out the brain a large effusion of serum was found beneath the Pia-Mater, raising it up in patches and causing it to resemble the elevations of Pemphigus. There was also an effusion into sub-arachnoidean Space, whilst the brain was much more solid than natural. On incising the right side a Cavity lined by a smooth shining membrane and containing serous fluid, was discovered. At the base of posterior lobe another small Cavity containing a clot of blood was seen, with a very hard and

thick base, corrugated with granulations of the size of millet-seed.
On cutting into left side, a clear serous fluid gushed out in a large stream and a cavity was seen larger than a walnut, containing about two ounces of fluid which on standing seperated into two portions: the upper one consisting of pure serum; the lower one resembling broken down brain tissue. The lining membrane of this cavity was not so distinct.

An

Inaugural Dissertation

On

Asthma

Submitted to the examination

of the

Provost Regents and Faculty of Physic

for the

Degree of Doctor of Medicine

By

Jas. G. H. Lewis

Asthma

It is generally admitted that the symptoms attending asthma are to be attributed to spasms, A spasmodic action of the fibres which encircle the Bronchial tubes and may be seen when enlarged encircling the larger Bronchi and have been traced to the smaller ones.

Some doubt their muscularity but it is generally believed that they have certain muscular power and are considered as being such slender small muscles alike those which encircle the bladder and small Intestines this view is supported by the experiments to prove the contractility of the Lungs and air tubes as mentioned by Dr Watson, also by Valentine who found by irritating the Parvagum caused the rings of the Trachea to contract Asthma therefore may be termed a spasmodic disease characterized by difficulty of breathing,

occurring in paroxysms depending on spasmodic contraction of the Bronchial tubes and not necessarily having fever or any organic diseases of the Heart or Lungs present. it seems as if the name of Asthma has been in past time incorrectly applied to dyspnoea but dyspnoea of itself is not a disease but merely a symptom of diseases and may be present in numerous diseases all such interference with arterialization of the blood in the lungs or loss of substance in the lungs as in Phthisis. congestion of the lungs as in Cardiac diseases. Pneumonia causing solidification of the lungs or when the air cells are compressed by effusion therefore the latter phenomena is not spasmodic asthma in consequence of so limited a knowledge of the auscultatory signs in former days and the means of detecting,

them dyspnoea could not always be traced to its origin but since we have more extensive knowledge of the physical signs which so often present themselves in various diseases and the knowledge of detecting them by the application of the ear we can trace dyspnoea to the disease by which it is caused and erase it from the category of diseases to which it was improperly placed.

Spasms of the bronchial are sometimes present in other diseases as in Bronchitis which is of a more fatal character. The inflammation here is the predominating affection the one to be feared and the one to combat with by medical agents and it would be incorrect to give to such diseases the name of asthma but it is when the spasms are the prominent affection

that the disease is entitled to the list of diseases called asthma.

Sometimes asthma is depending on no organic diseases merely functional or inervation but frequently connected with slight inflammation of the air passages or often of change in some organ which is organic in its character and is sufficient to call such affection into action.

Symptoms Course &c.

Persons who have an attack of asthma are aware of the recurring paroxysm by the premonitory symptoms occasionally which symptoms vary from a few hours to several days such as distension and flatulence of the stomach impaired appetite languor drowsiness pain in the head tightness of the chest and abnormal discharge of pale urine again the paroxysm comes on abruptly without

any previous sensations of discomfort it makes
its attack generally during the night between
the hours of bedtime & the beginning of morning
when seized by it the patient arises from his sleeping
posture being awakened to a sitting or erect position
with feelings of tightness in the chest and extreme
difficulty of breathing too intolerable to be borne
whilst lying down with feelings as if he would
suffocate violent efforts are put upon the inspiratory
muscles in order to expand the chest. a wheezing
noise is audible at some distance from the
patient made in breathing
The chest seems sometimes contracted from the
shrinking of the lungs the diaphragm is elevated
producing a depression of the epigastric region
inspiration seems more difficult than expiration.
he desires cool air & requests of some one to open

all the avenues for the entrance of it and often hastily makes his way towards the door a window where he places himself with his head and trunk partially projecting over the sill in search of air thinking that it will facilitate his breathing but little or no relief is obtained by it also without the body suffering the injurious effects of night exposure which it might do if so exposed when taxed with some other disease. The behavior of the patient indicates great suffering the countenance shows great anxiety and distress it seems to him as if he could not live often the patient is found with his face resting upon his hands, and elbows placed upon his knees. the head & breast is sometimes bathed in perspiration. the extremities are cool. the pulse are frequent irregular and feeble.

with palpitation of the heart but occasionally
the heart and pulse are normal or nearly so. the
bowels are in some cases deranged. the face is
pale or flushed or changeable the eyes are prom-
inent. speaking and coughing are imperfect
the urine is limpid and copious after a few
hours the symptoms abate sometimes with
or without expectoration of mucus the patient
sleeps after the paroxysm subsides and feel-
ing better or comparatively well in the
morning but pain soreness or some constric
tion of the chest remains during the day and
some dyspeptic feelings after eating and the
paroxysm occurring again at night with
all the former symptoms and declining again
the following morning these exacerbations
at night and remissions in the morning

may recur for sometime nearly a week perhaps when the paroxysms which have been gradually abating cease and leave the patient in usual health perhaps not to return for a year if the patient has had but one or two paroxysms or if the number of paroxysms increase the lenght of the interval is apt to shorten until the paroxysms may occur every one two or three months or may be brought on by the slightest cause and the patient is rarely free from it again after the first paroxysm the interval may be short and the second one may occur at the expiration of eight six four or two months. Physical signs during the paroxysms if no complication exists the sounds are usually clear by percussion the entering air produces a little sound which is audible to the ear when applied

to the thoray. a feeble respiratory murmur is heard and sometimes a feeble sibilant sound. the respiratory murmur is naturally heard occasionally towards the end of the paroxysm owing to a temporary relaxation of the constricted parts but soon becomes feeble again.

Laennec states that the air can be heard entering all parts of the lungs for one or two beaths after the patient has held his breath for a shot time a counted as many numbers as he could without stopping afterwards the former reappears.

Asthma may continue for a long time without seriously impairing the health if it is not sustained or accompanied by some other disease. But more frequently it is associated with some other diseases which are organic and

may be either the cause or the result of Asthma
the most common of these are disease of the
heart or emphysema of the lungs. Hypertrophy
and dilitation of the right cavities occurring
in Asthma by the accumulation of blood in them
caused by the constricted state of the bronchial
tubes impeding the pulmonary circulation
emphysema is produced while the constriction
of the Bronchia lessens the size of the lungs
and prevents partially the entrance of air into
them causing that contained in the vesicles to
expand and produces dilitation
As asthma of itself seldom terminates fatally
the many opportunities for Post-mortem
examinations have not been offered to the
observers of lesions after death as the result of
diseases as a variety of lesions have been found

after death in persons of whom such have been reported as died with Asthma if so it cannot be correctly said whether those lesions were the result of the diseases and then whether those diseases were causes or effects of Asthma the affections regarded as lesions of Asthma of an organic form and the direct causes of Asthmatic symptoms are in the brain spinal marrow or pneumogastric

There are generally predisposing causes operating in combination with exciting ones, these may operate upon a large number of persons and but few of them may ever become Asthmatic patients. the nature of this predisposition is unknown it may be said to exist in some change in the nervous constituents and it's effects transmitted to the respiratory organs.

It is believed by some that these paroxysms are nothing more than an attack of nervous gout or rheumatism affecting the respiratory organs and making the predisposition rheumatic diathesis excitability of the nervous system may favor it, spinal irritation inhalation of irritating vapours gases or dust sometimes produce it and a variety of impairments are thought to have a tendency to promote it when implanted in the nervous system it seems to occur most frequently in moist cool regions though not confined to any, the greatest exciting cause is perhaps cold the paroxysms seem to recur most frequently during the winter months exposure to hot air causes it when the atmosphere is highly charged with electricity patients are said to suffer from

dyspnoea chemical causes seem to affect some those persons going from one room to another changing direction in a journey, shutting a door. one prefers cool dry air another moist air some prefer breathing the contaminated air while others prefer the pure air. odours of Ipecacuanha and new mown hay produce dyspnoea.

The disease attacks those in middle life generally, rarely occurs to children and seldom originates in old age, and more frequently among males than females in middle life. old age about equal.

Asthma is sometimes found connected with organic affections of the thoracic viscera and thus often produce some dyspnoea without spasms of the air tubes to cause Asthma

they must act upon a predisposition to the disease perhaps Bronchitis is the one most frequently associated with asthma the cause which excites one will also excite the other and when the inflammation is once established may cause and sustain the spasmodic contraction of the air tubes and act as an exciting cause of Asthma. but if the inflammation be violent it would constitute bronchitis. but the two diseases are sometimes so near allied that it is with difficulty or not at all that we can determine to which class they belong.

Prognosis. Asthma is often incurable but frequently palliated and occasionally cured. but in the largest number of cases after being attacked by it. it is likely to recur in paroxysms. occasionally or frequently the remainder of

of life rarely fatal except accompanied by some other disease which it often is and then may prove fatal and it may also be the source of the disease and the indirect cause of death,
Treatment. In this disease our attention is first called to administer remidies that will relax the spasms secondly to prevent their recurrence should the disease be associated with bronchitis with a strong excited pulse venesection might be necessary both generally and locally if strenght of the patient is not too much exhausted but if no bronchitis is present and the pulse feeble we cannot consistently take blood as it might prove injurious to the patient Ipecacuanha is a valuable remedy given in large doses so as to produce emesis if necessary or in small ones so as merely to nauseate the

ptomach and retain that degree of effect fo
sometime lobelia is very effectual in pure cases
tartar emetic and squills are sometimes succes-
fully used in gouty cases colchicum administered
in nauseating doses is beneficial.
The former treatments are better directed to the
disease where some congestion or inflammation is
connected with it in cases of spasmodic
asthma having no congestion or inflammation
associated antispasmodics are useful laudanum
and sulphuric ether combined and given in
large doses has proved successful in the practice
of Prof Sam'l Cabell - asafetida and musk some-
times combined with morphia are effectual
remedies, coffee a cupfull taken every twenty or
thirty minutes is occasionally found to give
relief when its effects have not been counter-

acted by too much repetition of its use Stramonium has been often used by smoking the dried leaves and when used at the commencement of the paroxysm has given great relief but often fails and sometimes proves fatal by producing coma it therefore should be used with great caution in reference to the effects produced by it and its use should be suspended immediately should vertigo or nausea appear. The paroxysm may sometimes be relaxed by the inhalation of chloriform where there is no tendency to cerebal congestion opiates may be used successfully, many other remedies have been used and probably with some good effects electricity, cold water dashed upon the shoulders has arrested the paroxysm Rubefacients to the chest has been used inhaling the vapour of burning

paper previously saturated in solution of nitre dried ammonia tartar emetic or blister should be applied over the spine if any tenderness can be detected indicating spinal irritation.

During the interval our attention should be directed to the morbid tendency and efforts made to remove such by correcting all derangements of the system whether functional or organic in its character especially to the stomach and bowels if dyspeptic symptoms are present according to the indications we may give antacids carminatives and tonics. Constipation should be removed by laxatives and mercurial alteratives in derangement of the liver. in the female the functions of menstruation should be kept normal. colchicum will be found beneficial in

gouty cases. tonics and proper regimens will be deemed suitable in anaemia and general debility if any bronchial chronic inflammation remains should be treated with local depletion blistering & expectorants in nervous affections the metallic tonics such as nitric of silver submitrate of Bismuth sulphate of zinc &c. quinine may be found useful if the paroxysm occurs periodically.
All stimulating and indigestable diet should be avoided and a nutritious one substituted. the stomach should never be overloaded or distended the continued use of tea coffee and alcoholic drinks are injurious to many, the shower bath or sponging the chest every morning in cold water beginning in summer and continuing if followed immediately by reaction will often be found beneficial.

Exercise should be taken in different modes according to strength mild climates as a general thing, should be chosen on a long journey from home where the patient would have his attention directed to new scenes might afford much relief to asthmatic patients if no organic disease be associated.

An

[illegible]

on Acupuncture

[illegible]

of the

[illegible]

of the

University of Maryland

for the

Degree of Doctor of Medicine

By Wm Woodward

[illegible] bosom of the [illegible] Room, [illegible]
[illegible]
[illegible] — [illegible] —
[illegible] beneath the folds of an im-
[illegible]
[illegible]
gotten ages — "not obvious, not obtru-
[illegible], but retired".

[illegible]

Acupuncture — from acus, a needle,
and punctura, a prick — "The oper-
ation of making small punctures
in certain parts of the body with
a needle for the relief of certain
diseases." [illegible] Jap-
an it has been extensively used from
a remote period for the cure of
[illegible] disorders.

[illegible]

[illegible] its operation. [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] recommended it that it was brought

into use in different countries.

[illegible]

[illegible] are of [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] found in the ordinary sewing

[illegible]

[illegible]

[illegible] Patient [illegible]
own person.
How is the operation performed?
[illegible] with
rotatory motion, resting a mom-
ent or two if the pain be severe
till the parts accommodate them-
selves to the pressure. [illegible]
[illegible] experi-
enced which is the only discomfort
arising from the operation.
How long should it be permitted to remain?
Generally from 10 [illegible] to 24 [illegible]
[illegible]. The [illegible]
let them remain while the pat-
ient [illegible]
[illegible]. But [illegible]
[illegible] remaining in some cases

[illegible] employed it has failed to [illegible]. An important proposition has been made by Velpeau to cure aneurism by Acupuncture. He found that arteries were obliterated in 2 days [illegible] transfixed with needles. The idea he derived from his preceptor, Bretonneau, having observed in some of these cases that when an artery was transfixed it became inflamed [illegible] and obliteration. A most important suggestion if carried out in practice [illegible] and [illegible] over the danger of the operation by transfixing the artery [illegible] the necessity of cutting

[illegible] upon it as [illegible] practice
[illegible] [illegible] [illegible] [illegible]
[illegible] as a substitute for the lan-
cet which sometimes causes
[illegible] of the parts — in [illegible]
of the Scrotum and Penis — in
congenital Hydrocephalus, also
which has been in this way suc-
cessfully treated by my friend
and preceptor, Dr. Hunbar, — in
Hydrocele by [illegible] [illegible]
between the tunics, thus favoring
absorption — and in asphyxia
from drowning — upon what
principle I am not aware.
A [illegible] has [illegible] [illegible]
important aid by being [illegible]
with Galvanism and Electricity —

men call it Galvani-acupunc-
puncture. The operation thus
named consists in introducing
needles connected with the
ends of the electric machine
and was first introduced by
Sarlandiere in 1825, who used
it successfully in Paralysis,
Rheumatism, gout and various
nervous affections.

The celebrated Magendie recom-
mends Galvanic puncture in the
most obstinate disease of Amauro-
sis, He was led to his experim-
ents which were performed
on the lower animals from
noticing the great influence
the fifth pair of nerves has

over sight. He found that when
needles were placed in frontal
nerve where it emerges from
the supraorbital foramen—
the patient experienced over
the whole side of the head sen-
sation as of being struck upon
the part—and [illegible] further
trace out all the subdivisions
of the [illegible] the superior
part of the head. In another
experiment the frontal nerve
was again pricked, if [illegible]
[illegible] lightly—when there was a
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] of the fifth pair of [illegible]
[illegible] [illegible] [illegible]

was experienced for the Anaesthesia. These experiments were performed with Acupuncture alone — he next employed Galvanism in connection with it. A needle was fixed in the frontal nerve, another in the superior Maxillary and made to communicate severally with galvanic plates. Whenever continuity was established the patient felt painful commotions along the course of the nerve at the bottom of the orbit — at the same time light became more sensible and the pupil contracted. Magendie reports two-side cases [illegible]

local paralysis in which Gal-
vano-puncture furnished sat-
isfactory results. Besides the
Dr. Quadri, Professor of Clinical
Ophthalmology in the University
of Naples reports several remark-
able cases of the use of Acupunc-
ture alone in Amaurosis and
other affections of the eye.
One of these was a case of incipi-
ent Amaurosis. A favorable change
was noticed as soon as the needle
was introduced — and im-
mediate benefit was so great
as to astonish the observers.
Pursued to relate four cases
later the [illegible] entirely failed
and circumstances preventing

[illegible] further treatment of the case it was lost sight of. In a second case, however, the operation was more successful. A French lady, [illegible] years of age, presented herself with her right eye almost gone the left entirely blind. Two needles were introduced through a fold of each temple above the zygomatic arch when the patient immediately began to discern objects around her and vision was soon perfectly restored. The additional means used in this case were purgatives and [illegible] ing over the [illegible] of the

eye with phosphated oil.
From this we infer that if
any puncture does any good in
this case it should be employ-
ed in the chronic stage
only. Nor should the oper-
ation be employed without
sufficient care and discrim-
ination — as it is well known
that the slightest wounds in
this region have been fol-
lowed by complete blindness

An

Inaugural Dissertation

on

Inflammation

submitted

to the examination

of the

Board of Regents and Faculty of Physic

of the

University of Maryland

for

the degree of Doctor of Medicine

by

Edward Lloyd Howard

of Maryland.

[illegible] in the following pages, to attempt [illegible] inflammation or its treatment. [illegible] to [illegible] of [illegible] principles of that process and of the laws of stimulation and sedation as deduced from these principles; to write an essay rather than a thesis

Inflammation may be considered as of three varieties, this division being founded upon three separate conditions of the constitution viz:-

1st that which occurs when the vital power and actions are at the normal standard;

2nd that which is presented when the vital power are exalted above the standard of health;

3rd when they are depressed below that point.

The first of these can only be as the result of some

external influence, such as cold, mechanical or chemical injury, innoculation of a virus etc; or from the [illegible] of an organ, [illegible] by its proper stimulus in too great quantity.

In either of the other two cases local inflammation may also be excited by any of the above causes, [illegible] more easily indeed than in the healthy system; but it can even arise without any such influence, spontaneously. That is, it occurs in such constitutions, as the local expression of a general condition, just as we have the local inflammations of Rheumatic Fever etc.

This I consider the true pathology of idiopathic inflammations. Being a point of much interest and importance I will discuss it more fully in another place.

That an inflammation depends upon the

state of the system for its character is, I think, clearly shown by an attentive consideration of its phenomena. If an irritant as heat be applied to a part what effects are produced? There is an increased flow of blood to the part, and an increase of its nervous force, with an augmentation of its nutritive and natural functions. If the irritant be too long continued, or of too virtual action this exaltation may become inflammation; which is only a higher degree of nutrition.

Now these local phenomena, increased vascular and nervous force, with their effects and results, depend upon reflex action. Thus, the part is injured, the system, through sympathy, is made aware of the fact, it sends out force to repair the damage — an augmented supply of blood and nervous force. If the constitution be in a healthy condition these forces are just proportioned to the amount of work

to be done. If the injury be not severe, the part not vitally wounded, a slight exaltation of nutrition may remedy the evil, and resolution be accomplished. If the tissues are vitally injured their removal must be effected, and new tissue supply their place. This may be done by simple disintegration and absorption, or by sloughing and suppuration, and then repair taking place by granulation and [illegible]. But still the forces [illegible] are just adapted to their work. In such a case then, inflammation is beneficial, for though an abnormal process, yet it is to remedy an unnatural condition, and this it does at the least possible expense, and, provided the constitution continue in a healthy state, such inflammation should rather be regarded as a provisional function.

But suppose the same irritant be applied

when the vital power of the system is above par, and in the second variety of our division. Then the sensation of the injury is exaggerated; the action for repair are too vigorous. There is a tendency in such a condition to an irregular distribution of power. Too much blood and nerve power are sent to the irritated part. Too great action in the part is produced; there is too much vitality in it; and it suffers from over-nutrition — nutrition exalted even above what is requisite for the repair of the injury. In such a case, then, we have the inflammatory signs and results, redness, heat, pain and swelling — with probably cessation of function from over-stimulation — and the tendency to sloughing and suppuration developed in their highest degree.

If, on the other hand, we have that condition of the system in which vital power is diminished

we also have an abnormal inflammation — if such a term may be allowed. It is well known that in such a case, where the vital power of the system is below the point of health, there is often an increase of local action. The equilibrium is destroyed. There is a tendency to an unequal distribution of force. This is seen in delirium tremens, delirium traumaticum, the nervous phenomena of typhoid fever, and in the congestions and increase of many of the functions so common in admittedly asthenic affections generally. A diminution of power with increase of local action. We consequently have, often, in such a case, symptoms very similar to those we have just seen produced in the too vigorous system; although the blood and nervous power is below par in the system, yet, owing to the tendency to unequal distribution, there is an

[illegible] due accumulation to the irritated part.)

But this power though in too great quantity is depraved in quality, and impresses its peculiar type upon the resulting inflammation.

The two cases above mentioned do [illegible] to an excitation or a depression of both the blood and nervous systems. There may be a nearly normal condition of the one with either a marked excitation, or depression of the other. These distinctions are not, of course, absolute, as it cannot be supposed that a decided change can occur in the one system without some alteration in the other; so intimately are they connected. Nevertheless the division is important, as the different conditions can often be appreciated.

I have said that the inflammatory process is the effect of reflex action. But all the impressions

made upon the system is not reflected back to the point from which it originated. Although we have seen that inflammation for repair, in the healthy constitution, may be likened to a function, yet it is an unnatural one; and it is probable that no unnatural action, however insignificant, can take place without to a greater or less extent, influencing the whole system.

In the first variety of inflammation, this constitutional disturbance is known as inflammatory fever; and in slight injuries keeps pace with the mild character of the local affection. But if the injury be of large extent of long duration, or occur to an important organ, then the constitutional condition, and consequently, the local affection may pass into either of the other two species.

In the second variety not only is the local reflex action increased, as we have seen, but the nervous system is violently excited. It seems as if the latent power was now aroused and exerting itself. Hence we have ethmic inflammatory fever.

Lastly, in the third species, the equilibrium being destroyed, we also have great constitutional disturbance; known according to its prominent symptoms as Putrid, Malic, Typhoid fevers, etc.

As we have shown, the local inflammation to be the result of reflexion and dependent for its type on the state of the constitution, these affections of the system, although produced primarily by the local inflammation, must influence the course of that inflammation. That is, a constant action and reaction must be maintained between the local and constitutional diseases; and they thus mutually influence each other.

I have said that in the two latter conditions of the system mentioned in our division, local inflammation may arise spontaneously, or more correctly, may be as a local expression of a constitutional condition. Let us now examine more critically this proposition.

There is no affection of the system, or general disease, which does not express itself by a local manifestation. In all the exanthemata, in all forms of continued fever, in syphilis, scurvy, scrofula, the rheumatic, and every other diathesis, we have this local expression; which varies in form according to the character of the general disease; each one having its own peculiar mode of expression.

Now I contend that that state of the system in which the vital forces are exalted above the normal standard, as also that condition in which they are depressed below it, is each, per se, a general disease, and as such have each their local manifestations, which are, generally, internal inflammations

Let us examine the latter of these two conditions first. The fact, that where the vital powers are depressed there is developed a tendency to internal inflammations, is so generally acknowledged that there is no occasion to enter at any length upon the proof. I will only refer in this connection, to the frequency of pneumonias, pleurisies etc, as complications, in all asthenic affections; and to some experiments lately performed by Bernard, in which, upon starving some dogs, there was, in nearly every instance, developed an acute internal inflammation.

The other proposition that there can be an exaltation of the vital powers which will be a general disease with a tendency to internal inflammation, as an expression of that disease, will not be so readily admitted. In the first place can there be such a condition as an exaltation of vital power above the standard of health?

Reasoning from the fact that vital power is variable, and can be depressed below that point, it would appear probable that it can rise upwards, as well as downwards. Some seem to think that the highest point at which vital power can be is health, and that consequently there can result no disease from too much vital power. On this principle it would follow, that no one organ can be diseased from too much vitality. But, we all know that an organ can exist in this manner. And, conversely from this fact, that an organ can have its power & vitality increased, may we not reason that the whole system, which may be likened to an organ, can have its vitality also unhealthily augmented?

In certain diseases, some forms of insanity especially, we have an abnormally great excitation, as evidenced by greatly increased physical and intellectual power.

In the administration of tonics to a debilitated system

we see the vital powers gradually increased, and the patient improving until the point of health is reached. If they are then continued, disease is again produced, but unlike the one for which they were first given. It is, in fact, a disease from over-exaltation; the man has been over-toned; the point of health has been reached and passed. Alcohol certainly gives a temporary increase of power. If then, the system can be exalted for a time, who may fix the length of time during which exaltation may exist? And who can deny that vital power may be habitually exalted, just as it can be habitually depressed! But why support the argument on theoretical principles; can these objectors tell us what plethora is, if it be not a morbid augmentation of vital force? Take a healthy man, limit his exercise, and feed him highly, we will find a peculiar condition of system produced which we call plethora.

In the uninitiated observer he may appear to be in the highest state of healthy vigor, and even imagine himself so; but let him be exposed to cold or any other morbific cause and he is attacked by disease, while another, in apparently less robust health, exposed to the same influence, escapes. Is it not much more reasonable to suppose, that in morbid predisposition consisted in exaltation rather than in depression!

Such a man may be likened to a plant, which has been removed from its natural position, to the warm atmosphere and rich soil of the Conservatory. It grows, and blooms to all appearances but the more vigorously. Its rich luxuriance of foliage seems indicative of the highest degree of healthy activity. But the abbreviation of its natural term of existence, and its constant liability to disease, prove that its increased vigor is beyond the point of health, and at the expense

of its native ruggedness, and normal strength of constitution. Not only is this a pretty simile, but it shows that a vital organism may have its power abnormally diminished; and if this be true of one organism — the plant — it may be of the other — man.

There are, then, two separate and opposite conditions of constitution; the one with exaltation of vital power; the other with depression; each characterized by a tendency to irregular distribution of that power and inflammation, as a consequence of this irregularity.

Dr. Todd thinks, 'that acute internal inflammations are always dependent on some diathesis, the main characteristic of which, is the generation of some peculiar morbid matter, which, becoming accumulated in part, gives rise to inflammation in it.'

Until the existence of such matter can be demonstrated, this is not a hypothesis, and, I think, like

theory presented above more philosophical, more in accordance with observed phenomena.

I have said that the healthy inflammation — the first of our division — may pass into either of the other two varieties.

That it may fall into a lower grade — the third — is admitted by all. Thus, if an important organ be disabled, or if the inflammation be of large extent, or long duration, it must, by embarrassing the working of the system, or establishing a drain upon it, exhaust its vital powers, and thus, by lowering the constitutional vigor beyond the point of health, cause the inflammation to assume the asthenic type.

That a morbid process can produce an augmentation of vital power, seems, at first thought, rather paradoxical. But a little consideration will, I think, show that there is no inconsistency in the proposition;

for we must remember, although it be exaltation of power which is produced, yet, this exaltation is still, itself, a morbid state; so that, after all, it is only one morbid condition causing another.

It is a general physiological law, that a mild irritant, when applied to an organ, will increase the natural function of that organ; and just so the inflammation, acting as an irritant to the system, will exalt the constitutional powers. When a man is suffering from that prostration known in surgery as shock, an escharotic is applied, it arouses him from the depression into the normal status of power, but it may run further, and stimulate above this point into inflammatory fever, which is a higher grade than natural. The local trouble, in such a case, follows the general and becomes a sthenic inflammation.

But the final result of all stimulation is depression. And so the condition of constitution, which we have just been considering, may ultimately pass into the opposite direction, and chronic inflammation become asthenic. That is, although in the system may in the first part of an inflammation, have its powers exerted, in the latter they may become depressed.

The treatment indicated by the above principles is very simple. All these varieties are dependent for their type on the state of the constitution; now our treatment should be directed towards bringing the system back to its normal status of power as well as to the part itself when this latter can be reached.

In the first variety, which we have seen is a beneficial process, we should not interfere, except

to correct any evil tendency which may arise, as it's passing into one of the other two species, which, we have stated, may occur.

"The second, sthenic — demands that vital power be lowered to the normal standard; hence both local and general sedatives.

The third-asthenic — requires stimulation, that vital power may be raised to the point of health. But in many cases of asthenic inflammation, while we give stimulants to raise and equalize power, we apply sedatives to the part to prevent its accumulation at that point.

Of late years the old theory, that inflammation should always be treated by supporting measures, has been revived. Let us briefly examine some of the arguments by which it is maintained.

Dr. Todd thinks, 'a morbid condition cannot be benefited by any reduction of power.'

That this proposition is founded upon error is, I think, clearly shown by several facts.

If a blow be received on the eye we apply cold, swelling and extravasation of blood are undoubtedly prevented by the remedy.

If an artery be divided, and left to itself, what results? The hemorrhage continues until syncope is produced then, during the depression, a clot forms; the wound becomes closed; a gradual reaction comes on; the patient recovers! In this case the depression certainly exercises a beneficial influence.

Again, in Asthma, a spasm is causing suffocation; it gradually prevents aeration of the blood, and, when a certain stage of depression is reached, the spasm, from the depression relaxes; the man recovers.

The idea, then, that depression can never be favourable to a morbid condition is untrue; and this is

the fundamental principle of Dr. Todd's practice. Again, he tells us that, 'in an internal inflammation we want at the part all the vital power which can be obtained,' and, yet, he strongly recommends counter-irritants. Do not these draw away this force from the seat of injury?

One of Dr. Todd's strongest, or rather most plausible arguments is, 'that after any inflammation the patient is left in a debilitated condition, and, if death take place, it is by exhaustion,' and hence he concludes, that we must use remedies that prevent such depression.

But though it be admitted that the final result of a disease is depression, it does not follow that we must also grant that a depressing agent is not beneficial at any part of its course. In Asthma we have this depression, and we have seen that it is beneficial, is essential to recovery. Dr. Todd's practice is founded

upon the idea that the disease must run a certain course; and yet he tells us that a pneumonia may subside in the first stage. If it can end in the stage of engorgement, and resolution take place, as he says, why not direct the treatment for that end, instead of making provision for hepatization? If we cut short the disease the system is spared much force and material. We would rather imitate the Surgeon ~~and~~ when he uses cold applications to prevent suppuration, but if it still occurs, then ~~the~~ ~~in~~ poultices to procure the next most favourable termination.

Dr. Todd boasts that, "he is seldom troubled with delirium under his plan of treatment." This is very true, and it is because this symptom is almost entirely confined to asthenic cases — being a symptom of asthenia — for which cases, his treatment is the

most appropriate that can be adopted.

The treatment of the third variety—asthenic—is what have said stimulation. This is so universally acknowledged that it is unnecessary to interpose any argument for its support. Although so generally admitted, how seldom do we see it practiced, except in desperate cases.

The treatment that in these two last varieties should be to bring the vital powers back to the normal standard by elevating on the one hand, depressing on the other. Especially should it be remembered in the asthenic variety, that if the power be depressed by treatment below the point of health, the type will change to the asthenic. Neglect of this rule is, I believe, the secret of the opposition to the so-called antiphlogistic treatment. Men who practice medicine by the routine system, neglecting common sense, and the

general principles of pathology, imagine that the treatment depends on two opposite forces being brought into conflict, and, that the more active their force is made, the sooner is that of the disease broken.

An
Inaugural Dissertation
on
Syphilis
Submitted to the Examination
of the
Provost Regents and Faculty
of the
University of Maryland
for
The Degree of Doctor of Medicine
by
Samuel Adams
of
Maryland

To

Francis Donaldson M.D.

As

A tribute of enduring friendship and esteem,

And

In acknowledgement of innumerable favors at his hands,

This Thesis,

Is most gratefully inscribed

By

His friend and pupil,

The Author.

The syphilitic virus is a specific morbid poison originating in the female which poison unlike other toxic agents may produce a similar disease, it is a substance which cannot be detected ; in its simple unmixed state it eludes all our efforts, here micrography and chemistry have shown their impotence , we know it only by its mighty effects .-

The virus has ordinarily for its vehicle a thin, sero-sanious , mal-assimulated pus , in which organic detritus is more or less apparent .- But laudable pus , muco-pus may also be the means of its conveyance .. It unites with the blood and there undergoes changes which produce vast alterations in the whole mass of circulating fluid becoming intimately blended with it ; but a particular kind of pus , that which is generated by gangrene seems to neutralize it . - Virulent pus , like vaccine virus may be preserved for a long time without loosing its properties in tubes or

plates of glass, but to develope its effects it must be applied in a liquid state, or so placed as to be rendered such by the moisture of the part in which inserted. –

Even when greatly diluted this pus may be inoculated, Pauche has shown that a single drop in a glass of water is sufficient to render the liquid virulent, and this is worthy of note as it sanctions the doctorine of physiological absorption, and will place us on our guard against using water which has been used by venereal patients. –

The question of the multiplicity of viri for a long time gave rise to much discussion, but has been positively settled by Ricord who has proved by inoculation (the only test of any value) that blenorrhagic pus never produces syphilis and chancrous pus never gonorrhoea. –

The question is, is there one virus which produces blenorrhagia and another Syphilis, or are both diseases produced by the modification of one virus? – To this

Hunter replied in the negative, and explains the different effects by the difference of surface to which it is applied; if the specific virus is applied to a secreting surface blenorrhagia is the result, these surfaces are the urethral and vaginal mucous membranes; but if the same pus is applied to a non-secreting surface, the skin and mucous membranes bordering on it, as the glans, prepuce, lips, then chancre is the result.— But as chancres have been observed on all the mucous membranes, this idea of Hunter's is abandoned.—

Again, to explain the difference between gonorrhoea and syphilis a virus of different strengths has been admitted, a whole virus, and a demi-virus; and instead of a double virus Charmichael contends for four kinds of vir which produce the different accidents.—

The venereal virus is par-excellence a specific virus, specific because it constantly observes a certain plan or construction in its morbid processes; in its effects it presents

some of the phenomena of simple or common disease, but there is either some addition to these, or else one or more is so modified as to constitute its Speceficity. Thus we see a patient with tus or three cresentic ulcers on his legs, and if we can watch these they are healing by their concave borders, and extending by their convex.-

Now here are the conditions of common ulcers, and in different conditions we find these ulcers liable to the variations of common ulcers as being inflamed or congested., acute or chronic, but we look beyond these and see in their mode of extension and shape specific characters, and because they occur in syphilis we call them syphilitic ulcers.-

Or again, we see a patient with numerous small, dusky, light reddish-brown, elevated patches of inflammation on his skin, and on many there are white silvery scabs, and some arranged in a ring, here again

are the characters of common inflammation, but they are peculiarized, specified, in plan, in the tint of redness, and in general aspect, and because of these we regard the disease as specific, and call it psoriasis, and because of the additional peculiarity of coppery redness, and annular form, we call it Syphilitic psoriasis.—

Secondly, we find that this virus on being introduced into the blood, gives rise to peculiar phenomena, and is capable of transmission by inoculation and contagion.— We observe its specificity also in this, that the local phenomena of the disease are preceded by an affection of the whole economy, the whole blood seems altered, and nearly every function and sensation is diseased, and the patient feels ill all over before the local disease appears.—

And herein is a general distinction between Specific, and Simple or Common diseases, in the

latter the local phenomena precede the general or Constitutional, while in the Specific the order is reversed: this is much better seen in some other diseases, than in Syphilis.—

A third character, constituting a specific one of this virus, is the want of proportion between the Cause and effect, in common diseases the quantity of local disease is in direct proportion to the Cause exciting it, whether injury, heat, or poison be the cause; in specific diseases there is no such rule, thus in Syphilis, small-pox, and hydrophobia, the severity of the disease is not proportionate to the cause applied, a minimum of inoculated virus engenders as vast a disease as any larger quantity might.— In general the amount of common inflammatory fever after an operation bears an exact proportion to the amount of injury, and the amount of hectic fever to the amount of local disease, but in specific diseases it

is vastly different, in Syphilis and Cancer the most fearful disturbance of the whole economy may co-exist with the smallest amout of specific local disease.—

Another peculiarity of this virus is that its tendency is to affect the body Symmetrically, that is corresponding parts of the body only, are similarly diseased, we observe this in the cutaneous eruptions in which the disease on one side corresponds in Shape, Size, and position, with that on the opposite, and more particularly in the Syphilitic diseases of bone, in which the disease in one is copied with more than photographic accuracy in the other.—

Specific diseases alone are capable of transformation and Metamorphosis, in common diseases the changes are only those of degree; it increases or declines but is always the same and a continuous disease.— But in Specific diseases we see changes in quality or Kind, as well as in quantity.— Thus in Syphilis, a long series of terrible diseases

occur as a successive consequence of one local primary disease, different from them all. — They are all in one sense the same disease as having a single origen, but it is a disease susceptible of change in so far that it manifests itself at different times, in different parts, and in different forms in each, and in forms which are not determined by the nature of the tissue affected; again, a similar transformation of this disease may take place in its transference from one person to another whether by inheritance or contagion, a parent with one form of Secondary Syphilis may have a child with another, the child of a parent with Scherrus may have an epithelial, colloid, or Encephaloid cancer.

Time is a peculiarly important element in Specific diseases, there are few of the events of common diseases which are periodic, or measurable in time, there are none that can be compared for regularity with the set times of incubation of the morbid poisons or eruptive fevers, none that

are regularly intermittent or remittent.—

Neither are there in common diseases any periods of incubation so long as those which elapse between the application of a specific cause, and the appearance of its specific effect, as in Syphilis, the eruptive fevers, and hydrophobia.—

When a morbid poison is inoculated, as for example the virus from a syphilitic sore is inserted under the skin, it produces a specific effect both on the tissues at the place of inoculation, and on the blood as soon as it is absorbed, in other words a local and a Constitutional effect, and in both these effects its history must be traced. And first of the local changes.—

It is not proved by anything that can be seen immediately or even within two or three days after inoculation, the place of inoculation remains the same for a time apparently unaffected, and yet that a great change is wrought in it is clear, for it presently becomes the seat of a specific disease, the materials of which disease are supplied by blood

that nourishes healthily all other parts, even such as may have received injuries at or near the time of inoculation

The inoculated part is not therefore merely injured, but is peculiarly altered in its relations to the blood, which now nourishes it differently from all the rest of the body. —

The local changes may be generalized as subacute inflammatory processes, attended perhapse preceded by the deposition of a specific morbid material, which material contains an agent capable by inoculation of producing in another person the same symptoms as attended its own generation in the original Sufferer. Of the local changes partaking of an inflammatory character we have instances in the rupia and psoriasis of Syphilis, in the pustules of Small-pox, and intestinal ulcerations of Typhoid, in the suppurating tumors of glanders, and let me observe that it is because of these local differences in effect that we are

impelled to distinguish the Causes, and speak of them as specific: Syphilis never produces ulcers in the intestines, Scarlatina never produces Uriis, the causative poison of the one differs from the causative poison of the other, for on the selfsame subject it produces different effects. But not so with the Constitutional State which precedes and accompanies the local changes, it presents the general features of all humoral diseases. –

The Constitutional State is essentially one of depression, modified no doubt, and intermixed with those phenomena of reaction which the living body like a spring always opposes to the direct pressure of external influences.

The change of the blood is proved, if not by the general febrile or other disturbance, yet by the Specific Character of the ensuing disease, and by the consecutive secondary phenomena, or immunity from another disease of the same kind. – And this is a very striking point

in the case of this morbid virus ; our patient having been infected or recovered , suppose we try to infect him again in the course of a few months , we change our lancet , use fresh virus, make the punctures as before , or make a dozen , accumulate all the means of contagion possible but no longer will he give a single sign of the specific affection . — We have got from him all the phenomena he can give in answer to that particular reagent .

And I may compare this change to a chemical phenomena , Suppose we take a tumblerful of a solution of carbonate of soda and add an excess of nitric acid , we would get vehiment effervescence more or less according to the quantity of dissolved carbonate , and continuing until it had effected the complete disengagement of all the gas , then that particular moment having passed we might add nitric acid ad infinitum but not a single bubble would rise . — Just so our patient refuses to efferves any more from a new infection .

This conclusively proves that a change has occurred in the subject of our experiment, a change in him, has altered his relation to an Unchanged exterior cause (the Morbid poison) and by this change the poison is rendered inert to him, while it retains its activity to others; the poison remains Unchanged, but the patient has been altered Specifically.

Thus we get a general formula for the pathology of the Morbid poisons. A certain organic material A, soluble and partially volatile, affects particular relations with B, an ingredient, apparently normal ingredient of the blood; the result of their coming together is the utter destruction of the latter B, and an immense increase of the former A; not indeed at the spot of infection but elsewhere.

On the one hand the virus augments so much that it is found all over the body forming innumerable pustules and contaminating the whole body, while on the other hand the inward natural ingredient of the blood simul-

taneously diminishes, and at the end of the process is entirely exhausted.—

The local and peculiar changes produced by the direct effect of the morbid poison is essential to the complete manifestation of the Specific disease; and it is true for all morbid poisons that the existance of some part whose Nutrition is depressed is very favorable to the manifestation of the constitutional disease; thus in some cases of Cancer, the constitutional condition seems to have been latent until some local injury brought the part into a state apt for cancerous growth, the diathesis waited for the necessary local condition. Again, how often do we see Constitutional Syphilis exist which yet has no local manifestation until some depression of the vital powers by injury or disease comes on and the latent Constitutional disease immediately manifests itself by Specific local disease. Mr Paget mentions a man who for not less than five years after a

Syphilitic affection of the testicle has no sign of Syphilis except feeble health, but he accidentally blows his nose and immediately a well marked syphilitic disease of the virus occurred.

The most important of the Constitutional affections are the changes which the morbid material inoculated and absorbed may undergo in the blood, and the chief of these are Augmentation, Transformation, Combination, and Elimination. — The Augmentation or increase of the morbid material is beautifully illustrated in this virus, also in Small-pox, Vaccina, and glanders. — A. S.

In this virus the inoculation of the most infinitesimal quantity is followed by the formation of a vast and terrible disease, giving rise to the formation of suppurating structures from which virus similarly and equally potent is generated in million fold quantity, and thus from one patient virus enough to inoculate the whole race might be obtained owing to this mighty Multiplication.

The increase is thus evident .–

The effect of the inoculated morbid poison may be compared with that of a ferment introduced into some azotized compound, in some of the materials of which it excites such changes as issues in the production of a material like itself. What are the materials of the blood thus changed to the likeness of the morbid poison we cannot tell; but the observations of Dr. Carpenter showing how peculiarly liable to all contagious and other Zymotic diseases they are whose blood is surcharged with decomposing azotized materials may well lead us to believe that it is among these that many of the morbid poisons find their means of increase .–

And according to Prof Simon certain of these poisons in their action so convert some material of the blood that they wholly exhaust it, and leave the blood forever incapable of being again affected by it.

The increase of the morbid material however affected explains these characters of Specific diseases, namely, the apparent disproportion between the specific cause, and its specific effect, the want of correspondence between the local and constitutional phenomena, and the seeming capability of Self-augmentation :-

The transformation of the morbid material, is indicated by the diversity of the successive manifestations of a continuous Specific disease, thus in Syphelis the primary disease is followed with general regularity by a series of Secondary and tertiary diseases, and the terms often used would imply that these diseases are due to a morbid poison which is all along one and the same.

But identity of cause should be manifested in identity of effects, and thus we cannot regard the primary Symptoms the same as the Secondary, nor the tertiary as the Secondary, but each is a different

disease . . The sucession of morbid precesses proves a succession of changes, either in the agent poison, or in the patient, for on the whole the succession of Secondary and tertiary Syphilitic diseases is uniform in a great variety of patients . –

We may therefore believe that the regular Syphilitic phenomena depend on the transformation of the morbid poison, their irregularities on the constitutional peculiarities of the patient whether natural or acquired from treatment . –

The transformation here assumed is Self-probable seeing the analogy of successive transformations in all organic living materials, it is certainly proved by the different properties in regard to the communicability of the Syphilitic poison at different periods; thus the primary disease is communicable by inoculation, but not through the maternal blood to the foetus; the Secondary is communicable

to the child in utero, but not from the husband to the wife, or by inoculation, that is a man may have secondary Syphilis, and not infect his wife, but his child shall be born with well marked secondary disease, while the tertiary is neither communicable by inoculation or transmission but often giving rise to scrofula, that is not transmitted as Syphilis but as another form of cachexia known as Scrofula, and it is wonderful how frequently Scrofula depends upon this cause, indeed some pathologists regard all scrofula as nothing else than transmitted Syphilis

Again the instructive case of the vaccine vesicle which is better for fresh vaccination when the pus is taken on the eighth day than earlier or later proves successive transformations, periods of developement, maturity, and degeneration in the morbid poison. Many similar transformations in the morbid poison may be cited, and if it be accepted as a general occurrence it will explain many of the phe-

nomena of Specific diseases, the period of incubation or latency may correspond with the transformation preceding the effective stage of the poison. The prodromata, the precursive constitutional affection, and the successive stages of the disease, indicate the continuous transformation and varying influence of the same.

The increasing disturbance of the general health probably implies that the morbid poison increases while being transformed, that it grows with its developement.

The periodicity of all these events is a sign that the transformation of the morbid poison is accomplished in definite periods of time.

The sequalæ of the specific disease indicate yet further transformations, or more probably that the changes of the morbid poison have left the blood in a morbid state through the exhaustion of some of its natural constituents, or the presence of some complemental poison. —

The combination of the morbid poison with one or more of the normal constituents of the blood is indicated by the fact that when the same specific disease produced even by the inoculation of the same matter, effects many persons, it may present in each of them certain peculiar features. — And these personal qualities as they might be called, indicate modified qualities of the disease

The specific material of each disease, may in some measure be modified by its combinations with one or more of those normal materials of the blood which have in each person a peculiar or personal character

By such combinations we may explain those characters of specific diseases which appear in its changes in transmission from one person to another, such as the varieties of Syphilitic sores, and the varieties of their consequences in different persons inoculated from the same source, the changes in the forms of secondary Syphilis or cancer in its transmission from

parent to offspring &c. — And lastly the elimination of the material of a specific disease may be accomplished in many different ways, and may be regarded as the final purpose of the greater part of the morbid process. —

It is evident in the inoculable products of sores and pustules, in the infectious exhalations of the skin, pulmonary, and other surfaces, in the exanthematous fevers, in the deposits in and near gouty joints; and it is also probable that the specific materials of several other diseases are separated from the blood accumulated at the seats of the local morbid process, whence if no organs incorporating them be constructed they may be reabsorbed after transformation, and it is certain that the morbid materials of most specific diseases may be excreted with the natural or critical evacuations in the course of the disease, and this either in their natural state, or after transformation, or in combination with the constituents of specific medicines. —

The results of such separation or excretion are also various, sometimes it seems as if the whole morbid material was after various transformations removed from the blood, and the blood left healthy, as in small-pox, vaccina &c, sometimes part of the morbid material transformed or combined so as to be incapable of excretion remains in the blood and produces secondary phenomena or sequelae of the disease, as in the secondary phenomena of Syphilis.

Sometimes the production of the morbid material continues notwithstanding the separation of that already formed, as in the increase of the cancerous diathesis during the growth of Cancers.

Generally in whatever manner the separation is accomplished it is attended by such disturbance of the natural functions of a part that serious disease is superadded to that which is the more direct consequence of the presence of the morbid material in the blood. — And lastly a local

disease which for a time owes its origen and maintenance to a specific morbid condition of the blood may persist after that condition has ceased, the blood may regain its health by the separation of the morbid matereal, but the part diseased in the process of separation may so continue, now however the disease may be wholly local and curable by local treatment

I have now spoken of the life and nature of the Syphilitic virus, of its birth and old age, and shall now speak of its effects, when it is introduced into the body.

If then this virus is inoculated, it manifests itself by the production of an Ulceration, which ulcer is called a Chancre, and this Chancre stands in the same relation to syphilis that the bite of a mad-dog does to hydrophobia, there could be no constitutional syphilis, no general effects, without this primary sore, this ulcer, except through hereditary transmis-

sion from a diseased parent .-

Chancres are divided into two grand classes, the Constitutional or Indurated, and the Non-Constitutional or Non-Indurated ; there is in Syphilis a true and a Spurious virus, both give rise to local trouble, but by the local effect we can distinguish with positive certainty the genuine from the Spurious .-

In one of these varieties there is a predominance of the Specific or constitutional element, in the other a predominance of the inflammatory element.

Around every chancre there is a Sphere of virulent activity which extends with the duration of the chancre .-

Ricord contends for but one virus, this giving rise to indurated chancre at one time, and non-indurated at another ; the chancre depending on the constitution of the patient, the Constitution determining the sore, but the trou-

be with Ricord is that he has drawn his conclusions from the result of inoculations practiced on hospital patients many of whom had already had constitutional Syphilis, and in those who had had these symptoms (constitutional infection) simple, non-indurated chancre was produced, a simple ulceration; but in those who had had no syphilis, or only a simple, non-indurated sore, they had invariably a true Hunterian sore.—

The virus from an indurated chancre, introduced into a virgin constitution, never fails to produce a true indurated chancre, and never produces a simple sore, while that from a non-indurated chancre always produces a non-indurated, a non-indurated sore can never give rise to an Hunterian chancre.

Chancre is peculiar to the human race, it cannot be produced by inoculation in any of the inferior animals; it never exists spontaneously, the chancre is evi-

dence of a pre-existing virus, and when it exists we know that there must be a virus, which virus was derived from a pre-existing sore.—

But chancres differ in their commencement according to the mode of introduction of the virus, if it be introduced under the epidermis, a pustule is produced, which is developed into an ulcer after the breaking of the pustule; if to an excoriated or broken surface, an ulcer is at once formed without premonitory symptoms; and if it be introduced into the cellular tissue, a lymphatic vessel or ganglion an abcess is produced.—

Thus then for the virus to act it must be applied under the epidermis, into an open follicle, to a denuded or excoriated surface, or into some solution of continuity, and in this way reach the cellular tissue, lymphatic, or ganglion.

But to infect any of these parts the virus must be left for a certain time in contact with it without undergo-

ing ulceration ; the virus has generally no effect on tissues covered by a sound epidermis, but if contagious pus be left for a long time on sound skin, it finally irritates and excoriates it as all acrid morbid secretions do, and these excoriations at first simple, may give place to true inoculations and successive changes, as we observe every day in patients who had at first but a single sore.-

Thus the fraenum, the free portion of the prepuce, and that part of its internal layer which extends upon the base of the glans are the most frequent seat of chancres because these parts are most readily torn and excoriated in sexual intercourse, and the virus is retained in the folds of the membrane, and the same is true for the fourchette and neighbourhood of the caruncular myriformes in women.

The formation of chancre says Ricord, is not preceded by a period of incubation, the moment the specific virus is applied in contact with the tissues in such a manner

that infection is possible, a pocess is set up which goes on incessantly through its various degrees of regularity and rapidity, until a perfect ulcer is produced .- But in this he is certainly mistaken, the Hunterian chancre certainly has a period of incubation .-

Virulent pus always acts in the same manner wherever the primary ulcer is situated from which it was derived, sexual intercourse is not necessary for it to produce its effects, and it is not necessary for it to be recently secreted and warm .-

A chancre has no premonitory symptoms, the sensation of itching is not constant, it belongs rather to other diseases, especially to herpetic and eczematous eruptions which are so common on the genital organs, and may give rise to mistakes; when itching occurs it accompanies rather than precedes the chancre .-

Chancres of all varieties have two periods, one

the Specific or progressive period, the other the reparative period, or Non-Specific progressive; the first commences the moment the virus acts, and continues as long as the ulceration which may extend or remain stationary, furnishes inoculable pus; while the second is set up when the Specific ulcer passes into the state of a simple ulcer, ceases to furnish contagious pus, and passes on to cicatrization.—

The duration of the Specific period cannot be limited, but it may terminate in from two to four weeks, rarely sooner, often later.— Then the period of repair is announced by the disappearance of the red areola, the subsidence of the edges, whose margins assume a pale gray color, as they become adherent again, and incline towards the floor of the ulcer upon which they throw out concentric circles of cicatrization, the floor becomes clean, and covered with healthy granulations which are small, pointed, florid, sensitive, and bleed readily while the base is absorbed and disappears.

There are several varieties of chancres, and it is important, and indeed imperative for Scientific treatment, that they be carefully distinguished from each other; here as in the other branches of our Science that man is greatest who is the best diagnostician; diagnosis is the great Corner Stone which Supports the whole Science, which characterizes Modern Medicine, and has given such a mighty impulse to our great Science, in this gigantic Knowledge thirsty age. How can we treat scientifically that which we know not of?-

Chancres are divided into several classes, the indurated, Hunterian, Constitutional, hard, or Infecting Chancre; the Simple, Soft, Non-Indurated, Non-infecting; the Phagedenic, the gangrenous and the Chancre Larvæ.- Of these the simple, non-indurated, is the most frequent, constituting 75 per cent of all the cases of chancres, it is surely a local disease, and is never followed or

accompanied by Constitutional infection ; they suppurate profusely , are numerous , multiplying themselves by inoculation in the neighbourhood , irregular in Shape , with ragged undermined , everted edges , tends to rapid local destruction , are prone to assume the phagedenic form , the floor covered by a grayish deposit , and Show a predominance of the Inflammatory element .-

Its base presents to the touch the Softness of the Surrounding tissues , but may present a hard base which is not however due to Specific induration but to simple inflammation , it is a hardness which is to be distinguished from induration , and gives a feeling much like that of a common furuncle

Simple chancre is the most fertile source of chancres virus , it secretes pus having contagious properties in the highest degree , the pus inoculates whatever it touches , and retains for an indefinite period the qual-

ity of inoculability, so that several chancres are usually met with in the same person.—

Hence a simple chancre offers no immunity against fresh contagion from a chancre of the same species, and the pus is sure to produce a chancre of a like character, even on the same subject, but in the indurated the case is different. A diathesis being once formed, the subject of it is preserved from a second infection for ever, just as small-pox or scarlatina once passed prevents the future operations of these poisons. This law is absolute and invariable, so far as the syphilitic virus is concerned.—

Simple chancre has never been met with on the face or hairy scalp, and inoculation has failed to produce it in these parts, which is not the case with the indurated form, a fact of great importance in diagnosis.—

Simple chancre may be followed, but not necessarily at a fixed period, by bubo, this is always confined to the glands

neares the groin, and usually to a single gland, it may occur as a simple sympathetic adenitis capable of resolution or terminating in suppuration, the pus being non-inoculable, or it may occur as a specific bubo, in fact a glandular chancre which inevitably ends in suppuration, and the pus of which produces a characteristic pustule, and converts the wound following the opening of the collection into a real chancre.-

The indurated, Hunterian or constitutional chancre alone incubates, the period of incubation being eight or nine days.

The indurated chancre is usually small, perfectly round or circular, single, with no disposition to extend laterally, slow and indolent, does not occupy the whole thickness of the skin as was formerly supposed, but is superficial, with sloping regular edges, surrounded by a red, dusky livid, areola, the floor covered by a gray, shining, ash-colored

lymph like deposit, which cannot be rubbed off, and secreting a thin, inconsistent, ichorus, small in amount and exceedingly contagious

It is surrounded by a hard indurated base, clearly circumscribed, terminating abruptly, and giving to the touch a feel as if a split pea was imbedded in the part .– This base is peculiarly elastic, and resistant, perfectly characteristic, and infallibly diagnostic.

The induration is not due to inflammation, as the hardness which sometimes occurs in the Simple sore, for as the Inflammation Subsides, the Induration increases, and is at its height when the Chancre has healed, the induration increases, instead of Subsiding as the inflammation Subsides, while if it depended on inflammation it should subside with it .– It is an induration Sui-generis, a specific hardness .–

The induration never in any case precedes the

chancre, and rarely supervenes before the fifth day after infection or later. _ When a chancre becomes indurated or is to be followed by infection of the System, whether the induration be slightly or strongly marked, it is always attended by an engorgement of the lymphatics in connection with it, giving rise to Multiple engorgement; those below Pouparts ligament are engorged as well as those above, this cannot be explained by connection with the lymphatics, as the lymphatics of the penis do not pass below Pouparts ligament, the lymphatic System is the first to give evidence of the Syphilitic poison.

These glands (ganglia) do not attain a large Size, remain indolent, are always numerous, and never Suppurate . _ The indurated chancre has no disposition to extend locally, its aim is at the constitution, usually heals if no means are employed in two or three weeks, often covered by a scab, and never leaves a scar after healing. _ The

existance of a Scab is proof positive of the chancre being an indurated or constitutional Sore, the induration usually begins on the last day of the first week, and is compleated during the Second week; it has never been seen before the third day, and if it is to appear at all, it does so early, so that it is not to be considered as a termination of the chancre, but as the beginning of the Constitutional affection.—

Although indolent this form is not long in reaching the Stage of Cicatrization, the Ulceration is outlived by the induration, which may exist for months or years.—

Induration says Hoard, is a sure sign that the constitution is already affected.— The induration is a pathognomonic Sign, and Shows infallibly that the Sore will be followed by Secondary Symptoms.— The induration then is the beginning of the Constitutional affection,— of a Morbid and destructive diathesis, and this diathesis manifests

itself in the first Six months by Secondary Symptoms, which are followed at a more remote period by tertiary manifestations

As soon as induration occurs in a chancre, it ceases to be a local affection, induration proving that the system is already contaminated

The inoculation of pus from an indurated sore produces in those who have had already constitutional disease, no other result than a slight inflammation which sometimes ends in the formation of pustules which speedily abort; but sometimes a real chancre is produced, which however invariably presents itself as a primary ulcer with a soft base, a simple sore, which in its progress never acquires an indurated base, nor do the glands connected with it take on enlargement or induration.

To this variety M. Clere proposes the term Chancroïdé, the result being analagous to that produced by variolus or vaccine virus on those who have been already the subjects of

these morbific influences

Phagedenic, or Diphtheritic pultaceous chancres.- In this variety the characteristic induration is entirely wanting, or is rapidly destroyed where it once existed, if a thickening of the base and edges existed, as is sometimes observed it consisted only of unhealthy oedema or phlegmonous.-

The ulcers belonging to this class, and which constitute phagedenic ulcers par-excellence (corroding ulcers) are inclined to extend in surface rather than in depth, the skin, mucous membranes, submucous and subcutaneous cellular tissue oppose their progress much less than the fascia and muscular tissue.-

These chancres may retain their circular form, but generally they plough up the tissues irregularly, become Serpiginous, and tend to rapid destruction of the parts by

sloughing, which distinguishes them from all others.-

They may enlarge at all points of their circumference, but they are more liable to extend towards those parts which are dependent, and loose in texture, and thus favor infiltration of pus into the subcutaneous and submucous cellular tissue.

In many cases these chancres present great similarity to the different varieties of hospital gangrene. They are very irregular, with ragged, uneaven, undermined edges, their floor is covered with a grayish coating a kind of false membrane, this might be taken for a gangrenous eschar but is in reality a peculiar diptheritic secretion.

In some cases we find only pultaceous matter irregularly distributed over the surface, and granulations escaping here and there, which may at times be destroyed by ecchymis, hemorrhage and gangrene before they lead to cicatrization

In some, or indeed all of these cases of serpiginous

chancres, cicatrization does not take place as in other varieties, but commences at a few points near the center of the ulcer, while ulceration goes on near the circumference, or the edges heal on one side and fresh ulcerations appear on the other, leaving behind them cicatrices which they respect more than they do the sound tissues.-

The edges are everted, very thin, sometimes thickened by oedema or inflammation, their color is a dusky violet, like the dusky areola that surrounds the chancre; they are always very irritable, are attended with very severe pain and inflammation, and suppurate freely.-

Their duration is indefinite lasting for months or years, and destroy often rapidly to a great extent; Ricord mentions one which lasted seven years and still furnished inoculable pus; they are kept up and extended not only by the progress of the specific ulceration, but also by successive inoculations from one place to another, and

their number is illimitable .

Phagedenic chancres are ulcers of an acute type with reference to the successive parts which they involve, but as a chronic affection when we regard their total duration, especially in the serpiginous variety .-

The undermining of the edges is a proof of rapid ulceration, and is caused by the violent inflammation destroying the cellular tissue which is less vascular and less highly organized, than the highly vital and organized skin which resists its action much longer .-

Phagedenic chancre has nothing peculiar at first, inoculation giving at first the same result in all chancres

Pus from a phagedenic chancre inoculates as readily as pus from an indurated, and retains its inoculability for a longer time, but in the gangrenous phagedenic the gangrene destroys the specificity of the virus .-

Bubos are common, and often assume a phagedenic character in these cases. Secondary symptoms never occur in these cases, and if they do the chancre was not truly phagedenic, but an indurated sore which took on phagedenism.--

Phagedenism is usually confined to the non-indurated chancres, and depends on the violence of the inflammation, on irritable applications, on the virulity of the virus, or on the constitutional condition of the patient.--

Sometimes when a simple chancre occurs in broken down subjects, although simple in the beginning it may in consequence of the constitution become phagedenic

Inflammatory Gangrenous Phagedenic Chancres.

In some cases chancres excite, or are complicated with very acute inflammation which may terminate in gangrene, and here the specific ulcer is destroyed by the rapid progress of the ulceration, and on the fall of the eschar or sphacelus

only a simple ulcer remains. The tissue on which it is situated may remain engorged from oedema or inflammation but it presents none of the characters of induration which belong to the Hunterian sore. In this form the characteristic circumstance is a slough of a gray or black color, and the cause of the extension of the ulceration is gangrene from excess of inflammation, a gangrene that differs in no respect from that occasioned by ordinary inflammation.—

When true gangrene occurs, the chancre is destroyed by the slough, hence if gangrene which may be called a good complication, takes place early, no induration remains — if it be an indurated sore — and there is no risk of secondary symptoms. Well marked cases of this chancre are rare, they are almost always combined with the other varieties, and complicated with irritability, sensibility and pain.

These chancres occur in cachectic and broken down scrofulous constitutions, and show a debilitated state of health.

Chancre Larvé .. Ricord has proved incontestably that urinal and deep vaginal chancres, and those within the urethra are as frequent as they were once considered rare, only giving rise to the symptoms of blenorrhagia, and this virulent gonorrhoea, as it has been called, gives rise to symptoms under which the chancre remains concealed to those who look only superficially. He has proved without a doubt, that chancre alone produces chancre, and that it cannot be produced by the mucus or muco-purulent matter of a simple gonorrhoea

This shows us the incorrectness of those cases of men or women who communicate syphilis to others, and yet declare that they labour only under gonorrhoea. In these cases the chancre was produced by the virulent pus of a chancre larvé, and the gonorrhoea by the irritated secretions of the vagina for Ricord has shown that two thirds of all the cases of gonorrhoea are caught from women who have no gonorrhoea but simply a

vaginal discharge, leucorrhoea &c .. These cases have been proved to be due to a concealed chancre, which by reason of its seat gives rise to blenorrhagia, the pus acting as a simple irritant to the canal..

Buboes. — By bubo is meant an inflammatory enlargement of the lymphatic glands (adenitis) occurring usually in the groins, depending on simple irritation, or on the absorption of a morbid poison, and terminating in resolution or suppuration, this suppuration furnishing inoculable if the bubo be virulent.

Strictly speaking the name of Syphilitic buboes should be given only to glandular engorgements dependent on the absorption of the venereal virus, but authors enecumerate under this head not only all those which are preceded by the primary affections gonorrhoea and chancre, but those which follow a suspicious connection, buboes which I cannot admit.

Buboes are divided into three classes, - Simple

irritative, Virulent, and Constitutional --

The simple irritative depends simply on the transmission of inflammation or irritation along the lymphatic vessel to the gland, they may follow a chancre or one of the form of gonorrhoea -- They appear sooner than the other varieties, generally at the outset, or during the acute Stage of the symptoms to which they appear to be due, and they may depend on the transmission of simple non-virulent pus.

They never furnish **inoculable** pus, and never give rise to constitutional infection -- In the irritative bubo the constitution determines whether the bubo will suppurate or not; if the patient is scrofulous suppuration will occur, or if his general health be depressed from any cause, it will suppurate and be discharged, and rapid healing then takes place --

In simple irritative bubo, the inflammation is a simple, non-Specific inflammation, and may or may not

suppurate according to circumstances .. In this form of bubo we never have irregular edges, even if it suppurates freely .-

Virulent buboes, due to the absorption of the Syphilitic virus .. This variety which always has a chancre as its antecedent, is already a successive symptom. It rarely occurs before the second week, often later, and is the result of the direct passage of the virus into the vessel and gland, it traverses the lymphatic vessels but rarely affects them; usually there is only one gland affected (one bubo), but if the chancre is large, and has connection with a number of lymphatics, then there may be a number of buboes .-

Virulent pus undergoes no change in its passage through the first set of lymphatic vessels and glands, but beyond the first set it loses its Specific contagious property.

There are two modes of absorption of the Syphilitic virus, first through the lymphatics, giving rise to bubo

containing inoculable pus, and secondly through the veins giving rise to constitutional symptoms not inoculable. The situation of the chancre has a great influence on the production of buboes. — Chancres on the inferior portion of the penis, and especially on the frenum giving rise to them much more frequently than on other regions...

There must be anatomical connection between the ulcer and the extremities of the lymphatic vessels for these buboes to take place. — The virus generally traverses the lymphatic vessels without infecting them, but sometimes it stops in them producing virulent angeioleucitis or bubo of the lymphatic vessel, in every way similar to glandular bubo.

The lymphatic vessels in direct communication with the primary virulent ulcers and ganglia in which they terminate, are more capable of being infected, and these may be infected singly or together. — Virulent

infection is not communicated from one ganglion to another by the interganglionic lymphatics.-

Virulent buboes inevitably inflame and Suppurate, and are characterized by great rapidity of march, rapid enlargement, rapid Suppuration, and rapid opening, and this rapidity of progress is evidence of their being Specific in character.- When these buboes open the edges and Sometimes the surrounding parts become inoculated, and vast chancres are formed in the groins; virulent bubos are therefore identical with chancres, and are to a certain degree only primary Symptoms.-

When leeches are applied to these bubos, they should not be applied around the bubo, but directly on its Summit, if applied around the gland, each bite becomes inoculated and forms a chancre with rapid tendency to Spread.

These bubos are modified by the constitutional State of the patient; if the health be depressed the chancres

formed have no tendency to heal, and remain for months either stationary or extending.— When a lymphatic or ganglion is infected it may become a cause of irritation or simple non-specific inflammation to the neighbouring superficial or deep ganglia. The same effect is produced in the cellular tissue around the gland, but specific inflammation and virulent abcess of the cellular tissue can occur only in the neighbourhood of a chancre, and by direct infiltration or imbibation of the virus.—

These bubres are nearly always the result of a non-indurated chancre, and the bubo is only an additional primary symptom, and since Secondary Symptoms are not proportionate to the number of primary, the mere presence of a bubo neither adds to, nor takes from, the chances of constitutional infection.—

Constitutional, Secondary, or true syphilitic bubo, or buboes from an indurated chancre, are small, indolent, numerous, usually a whole congeries of glands becoming affected giving rise to multiple engorgement, and occurring as soon as the induration begins in the chancre

Buboes which occur under the influence of constitutional Syphilis never Suppurate Specifically, and if they do so at all, which is exceedingly rare, it is accidentally, and the pus is never inoculable, secondary symptoms never being inoculable. — The multiple engorgement occurs both above and below Pouparts ligament, and cannot be explained by anatomical connection as in the virulent variety, as the lymphatics of the penis do not pass below Pouparts ligament.

The lymphatic system is the first to be affected by constitutional syphilis, as is shown by the early swell-

ing of the posterior Cervical glands , this being one of the earliest symptoms , occurring often before the cutaneous eruptions ; and this general enlargement of the glands depends on the presence of the Syphilitic diathesis , and is but one of a series of constitutional troubles to which it gives rise . –

The posterior cervical engorgement is an exceedingly valuable sign , and the nearer the bubo is to the occipital bone the more valuable it becomes ; they usually occur just beneath the occiput , one on each side , and posterior to the edge of the sterno-mastoid muscle . – The patient complains of pain and stiffness of the neck , and they remain stationary for a long time . –

It is probable , or indeed certain that this multiple engorgement attacks the whole lymphatic glandular system both superficial and deep , but it is only in those which are superficial that we detect the enlargement.

The multiple engorgement in the groins is an exceeding ly important diagnostic sign, and Ricord relies on it for distinguishing the Chancre with indurated base from simple inflammation from the true indurated sore. — In the Chancre with indurated base from inflammation we never have the multiple engorgement in the groins, hence Ricord always examines the groins, and places as much importance on it as on the character of the sore.

Constitutional Symptoms. — — — After a patient has had a constitutional chancre, all remains quiet for some time, a calm reigns during which apparent health prevails, but at the end of from six weeks to two months we observe a profound change in the aspect of the patient, one of the earliest symptoms being Anæmia or Chloro-anaemia, and with this there is often a bellows murmur in

the heart .— At the same time his eyes loose their brilliancy, his complexion becomes muddy, cadaverous and dusky, his muscular powers diminish, the blood is impoverished and anaemic, the patient has nocturnal pains, and his hair falls out, showing a general breaking down of the constitution, and profound change in the whole economy.

The constitutional changes manifest themselves under two forms, either Secondary or tertiary .— The Secondary include the affections of the Skin and mucous membranes, and the tertiary those of the Bones and fibrous tissues .— The Secondary are Superficial, the tertiary deep in character .—

The Secondary Symptoms rarely appear before the Sixth week, or later than the sixth month, and they manifest themselves by the various cutaneous eruptions, these being either of the superficial or deep Kind, either the Erythematous, or the Pustulae or Tuberculae.

These symptoms lead me to notice a point excellently illustrated by Prof Simon .. He remarks that many unnatural or diseased conditions are not really unnatural in themselves, but are the proper and necessary consequences of some Cause or influence which has acted on a healthy body. — In syphilis, the skin, covered all over with unsightly pustules is in a very unnatural state; but it is not the eruption, nor the constitutional disturbance, neither, that is really unnatural, but the presence of Infectious matter in the blood, which acting on a perfectly natural system thus calls forth its expulsive efforts. —

The Characters of the Syphilitic eruptions are, their Multiformity, their persistency and obstinacy, their Coppery tint when fading away, their tendency to assume an annular or Circular form, and the entire absence of Itching in any of their forms.

The Multiformity of an eruption is an exceeding-

ly good indication of its syphilitic nature . – When we find the exanthemata , pustulae , and tuberculae intermingled we can pretty surely state its Etiology .

The obstinacy is also diagnostic , we find nothing in non-specific dermatology comparable with the persistance y of many of the eruptions of this disease , lasting months and years . –

In considering the Coppery tint I must dissent from the commonly assumed doctorine . The eruptions of Syphilis never assume a coppery tint until they begin to fade , in the early stage they are not distinguishable in their tint from other diseases ; but as the eruption fades the coppery tint comes in view , and a coppery macula is often persistent . –

The Circular form of the eruption is well seen in psoriasis , the tuberculae , and bullae &c . – The symptom of itching is also important , if an eruption itches we

can say pretty correctly that it does not depend on Syphilis; and if a patient with the Syphilitic diathesis have an eruption which itches, we are sure that a vulgar eruption complicates the specific .. Under the influence of Mercury the Specific will disappear, and the vulgar itching eruption remains behind ..

The simplest form of Secondary eruptions are erythema and roseola .. Erythema occurs as a simple diffused blush over the surface, it is the simplest form of eruption, is rarely or never followed by tertiary symptoms, and shows a good constitution, or a Mild type of the virus .. They differ from the simple non-specific forms of eruption in their duration .. Simple erythema never lasts longer than from seven to nine days, but we observe this Specific variety lasting for months .. Where a suspicious erythema or roseola lasts for five or six weeks, we are certain of its Syphilitic

origen . The pustulae , bullae and tuberculae indicate a great intensity of the virus , or a broken down constitution , and are always followed by tertiary symptoms . –

Acne is one of the commonest forms of eruption , they are distinguished from the simple form by the fact that they occur on the legs , and always leave a scar or cicatrix .. Simple acne never occur on the legs , and never leave a cicatrix .. –

Impetigo or Meletagara is a very common syphilitic eruption , it is characterized by flat oval pustules which break and the secretion still continuing a raised , friable honey like scab is formed hence the name Meletagara.

They have but little inflammation at their base , and are either clustered or spread over the surface .. –

Ecthyma (ex θυειν. to burst forth) is an acute inflammation of the skin characterized by the eruption of prominent pustules of a roundish form and considerable

size ; the pustules are discrete and scattered , surrounded by an inflamed and indurated base , and terminate in dark colored crusts , the scab being the contents of the pustule , no further secretion taking place as in impetigo , and when they fall they leave a coppery stain or superficial ulcer.

These pustules are the cause of the majority of the Cachectic ulcers which occur on the legs of Syphilitic patients . — The secondary bullous eruptions are pemphigus and rupia . — Pemphigus is an eruption of bullæ composed of serous vesicles on an inflamed base ; they commence as red spots , which increase to blebs or vesicles , the blebs beginning in the center of the red erythematous spots and gradually covering in the red patches when nothing but large bullae can be seen . These terminate in red , broun , or black crusts

The bullae rise in the course of a few hours, they vary in size from a shot to a wall-nut or hen's egg and contain a transparent limpid serum which is discharged by rupture or dessicates into a dark scab.

It may last indefinitely, and when chronic is always fatal. — Infantile pemphigus is always syphilitic.

The only eruption coming strictly under the title of pustular syphilis is rupia, an affection depending especially on a pyogenic condition of the constitution. —

Rupia is characterized by the eruption of large bullae, which become pustular, few in number, and surrounded by a narrow zone of redness; the bullae at first serous, speedily become pustular or sanguinolent, concretes and dessicates into a large, black rough crust. — The crusts of non-syphilitic rupia are imbricated like an oyster shell, while the syph-

ilitic are like the bark of a tree, rough and ragged with no sign of imbieration .– When the crusts fall off they leave behind them atonic ulcers of a circular form and various depth which secrete an abundant ichorus, purulent and foetid fluid, and are indisposed to heal .–

Rupia lasts for months, and indicates a most intense character of the virus, and is the most Syphilitic of all the secondary affections .–

At the same time that the secondary affections appear on the skin, we observe certain affections of the mucous membranes which correspond in character to the skin affections .–

Mucous Papules are one of the earliest symptoms of secondary Syphilis, occurring simultaneously with the affection of the skin .– They occur on the mucous membranes most frequently at

the two extremities of the alimentary canal and especially at parts where two mucous surfaces rub together, as the pillars of the fauces, the labiae, and between the nates in unclean women. — They occur in parts constantly moistened by any secretion, appear first about the sixth week, are much more common in the female than in the male, occur along the border of the tongue and begin as a white spot looking like the white eschar formed by the nitrate of silver. — This falls off and leaves an excoriated surface, which gradually rises and forms a rounded elevation.

These papules bleed freely on being rubbed and can be distinguished from coagulated albumen by this means; they look like erosions and not like ulcerations, but all ulcerations of a syphilitic character on the mucous membranes originate in these papules. —

They are the most obstinate of all the secondary

symptoms, it is the last to disappear and always returns for at least two years after the primary symptoms, sometimes as late as nine years, and reappears as soon as the patient returns to his ordinary habits.--

They constitute when occurring between the nates, what is called intertrigo, and they always occupy both sides of the mucous membrane and frequently occur between the os and walls of the vagina.--

They are exceedingly valuable in regard to treatment*, when mercury is used, as soon as they begin to disappear the right dose has been attained, and should be continued, they thus become valuable tests for treatment, and hence they should not be healed immediately.-- If mercurial stomatitis has been produced they may accompany it, and can be always distinguished from the stomatitis by the acid nitrate of mercury.-- This agent cures the papules

in a few hours if they be syphilitic, it precipitates the the pox as Ricord says .- If they be simple the chlorinated soda cures them rapidly, while if they are syphilitic it has no effect

Peri-Articular-pains .- These are a very common secondary symptom, they occur most frequently just after the patient gets warmly fixed in bed, and are hence thought to be confined to the night; but the night has no influence in producing them, for if the patient sleeps during the day instead of the night (as in watchmen) they then occur as during the night .-

The most frequent place of occurrence is the insertion of the deltoid muscle, they are exceedingly troublesome and often very acute .-

It is very important and quite easy to distinguish them from rheumatic pains which also occur at night

The syphilitic pains occur just after getting warmly fixed in bed, that is in the early part of the night while the rheumatic occur only towards Morning, in the latter part of the night . – This is pathognomonic.

Syphilitic Iritis . – In syphilitic iritis the inflammation involves the whole substance of the iris, (parenchymatous iritis) and is very apt to spread to the other tissues of the eye . – This disease is often insidious in its attacks commencing with slight symptoms . –

The constitutional disease appears to be both the predisposing and exciting cause, and in some cases the disease is excited by some occasional cause as exposure to cold &c . – There is well marked redness, not only from ordinary circumcorneal congestion which is great, but also from considerable conjunctival injection . – The iris is dull

having lost its brilliancy, it is changed in color, appears thick and swollen, and very sluggish or immovable; the edge is irregular having a velvety appearence, there is effusion of lymph on the iris having a bead like appearence, and the pupil is angularly displaced towards the nose or may be adherent to the lens (Synechia posterior).—

There is intolerence of light and lachrymation, and the circumorbital pain is very great at night.— The cornea is dim and muddy looking and the surface of the iris presents small extravasations of blood.—

There is usually present some secondary eruption on the skin and there is often smart inflammatory fever.— Abcesses may form on the iris which bursting give rise to hypopion, and sometimes there are eruptions on the iris similar in character to those

on the skin, as pustules &c.- The iris does not appear red as other inflamed parts, but is of a color compounded of its own natural color and that of the stagnant blood.- Thus, a blue iris becomes green, and a brown iris reddish brown, and both eyes are generally affected.- The closure of the pupil is owing to the fact that the iris is contracted by the existence of photophobia, and the lymph in consolidating contracts and draws together the margins of the pupil, and fixes it in this condition.-

As the congestion in irritis subsides, the progress of the absorption of the exuded matter is beautifully seen.- Matter which has been recently exuded rapidly disappears.- Tubercles of lymph with vessels ramifying on the surface progressively shrink and the blood in the vessels becomes dark and the color of the blood in ecchymosis, organized lymph is often permanent.-

Tertiary Symptoms .. Syphilitic sarcocele or albuginitis is one of the first tertiary symptoms to appear and is almost a symptom of the transition period .. It may occur in the fourth or fifth month, but it is especially at a later period after months or years that it is apt to supervene .. This disease always affects the body of the organ, and we have no pain, and no affection of the epididymis, but on feeling the organ we observe fibrous Zones running around it, and hard Nodules in the body of the gland .. Both testicles are affected, but the nodules never project on the surface so as to change the shape of the organ .. The organ is heavy, hard and resistant, and may last for months or years, never suppurates, and terminates in resolution leaving no trace of its existence .. Tuberculous tumors of the scrotum alone Suppurate.

The disease is situated in the tunica albuginia and fibro-cellular structure of the body of the testicle, and consists of fibro-plastic tissue which involves and obliterates the tubuli seminiferi

Osteocopic pains are the first appreciable symptoms of Ostitis or periostitis, these pains are fixed and located, the least pressure increases them, and they are heightened by heat, and generally nocturnal. - Diseased inflammation of the periosteum is rarer than commonly supposed, and are capable of complete resolution, or may terminate in suppuration or abcess. - Periostitis presents three varieties; the first is indolent, long in duration and ends in resolution. - It contains a serous or sero-albuminous fluid which often resembles scrofulous pus, or synoval fluid. - In the second variety suppuration occurs sooner or later, and the subjacent bone rarely escapes involvement. The third variety is slower, very painful both on pressure and otherwise, plastic matter capable of organization elevates the periosteum, which is thickened, and thus one of the varieties of exostosis is formed.

Ostitis occurs in the same situations as periostitis, attacks the superfices of the bone, is slow and chronic in its course, and terminates in resolution, suppuration, caries, necrosis, or in eburnated exostoses.

Treatment . — I shall now speak of the scientific treatment of Syphilis, which is the most important part of the subject, as there is no disease which is so frequently and so universally maltreated in all its forms and stages . —

In regard to the use of Mercury I wish especially to dwell, as it is in the use of this agent that all the difficulty has occurred.

It is now well known that in seventy five per cent of the cases of Syphilis, constituting the variety of non-indurated Chancre, Mercury is not only not beneficial, but is absolutely and positively injurious, hindering the cicatrization of the sore, breaking down the patients health, and superadding another disease (for in the manner in which Surgeons use this potent drug until the gums are ulcerated and the teeth loose, it really becomes a disease,) adding this I say to the already

existing affection .– It is malpractice and unscientific to use mercury in this class of sores, and in cases of non-indurated chancre it should never be employed .–

The mercurial treatment then is confined to the remaining twenty five per cent, constituting the true constitutional or indurated sore, but because a patient has an indurated sore it is no excuse for the malase of this agent; we want not sore gums and loose teeth, not mercurial cachexia, not the constitutional effects of the agent, but the Specific and only the Specific*.

Mercury has no influence, not the slightest, in preventing the occurrence of secondary symptoms, these symptoms will follow in every case do what you will .– My learned friend, the Surgeon to the Alms House Hospital,

* I mean the specific effect it has over this disease, and not its ordinary specific effect as shown by ptyalism, and other constitutional phenomena.

whose experience on this disease has been very great, having seen some 8 or 9000 cases, states that he has never seen the first case of indurated chancre which was not followed by constitutional infection, whatever treatment was employed; and he states with Ricord that mercury retards the occurrence, and reverses or breaks up the order of the appearence of the symptoms. but they will certainly occur.—

The symptoms may be latent for some time, the patient may live with his diathesis in tranquillity. but let the vital powers be depressed in any way below the normal standard, and the tranquillity is immediately disturbed, and constitutional troubles show themselves in the superficial and deep eruptions.— It is not however every depression which will cause this outburst. the depression must be a specific depression.—

The depression caused by an intermittent fever will be Specific for one patient, while in another it would call forth no outburst of the poison.-

In mercurial treatment the constitutional effect is not wanted, it is injurious, the moment the gums become touched, the chancres cease to heal, and a direct stop is put to the progress of the cure.- Indeed Dr Farnandis states from an immense experience, and an acute and long continued observation that mercury is only Specific when the Constitutional symptoms come on, and that when this agent is used in the primary symptoms the Secondary are more Obstinate and violent, and if then used it has not the same beneficial influence which it has in those cases in which its use is deferred until the constitutional symptoms appear.-

If not used in the early stage, the influence which it exerts when the Secondary troubles come on

is almost magical, the eruptions rapidly disappear, and the health improves with great rapidity.

The Method then that I recommend is called the Method by Extinction. — This consists in giving Mercury for eight days in small doses, one grain of the Protoiodide at night, then stopping for eight days to observe the effect, always making the Healing of the Sore the Criterion and not the state of the Gums. — If no improvement takes place at the end of this time, begin again with the same dose, and when improvement begins in the Sore we have reached the appropriate dose, and should then stop, always keeping within the point of Salivation and irritation of the gums, either by diminishing the dose, or lessening the frequency of the administration.

The points in this treatment are, small doses, sound gums, healing sores, and the fact that as soon as Salivation comes on healing in the

ulcer ceases .— But we are obliged to administer mercury in the primary stage because when patients come to us we must do something, and when the agent is used in this manner, no harm at least will be done

The treatment for the indurated Chancre consists in the administration of one grain of the Protoiodide at night, this is continued until the sore begins to heal, gradually increasing by giving one grain in the morning also, if no healing takes place at the end of eight days .— This method is applicable also to secondary Symptoms continuing the treatment until the eruptions fade and keeping at that dose .. Or one of the other compounds, The Protochloride or Blue mass may be used ..

The destruction of a Chancre as soon as it appears, or the abortive treatment is one of the most interesting points connected with Syphilis

and one which has given rise to the most erroneous theories, and most dangerous practice. –

When a chancre is destroyed by cauterization before the Sixth day after infection, the cure is very rapid, and the patient is prevented from constitutional infection. – But when it has existed a certain time, and is already attended with induration cauterization neither prevents nor favors constitutional infection, in this case it is no longer an abortive, but only serves to modify the ulcer, and hasten its cicatrization. –

Cauterization does not favor the developement of buboes as Bell imagined, daily observation contradicts this statement, but like any other cause of irritation this may excite sympathetic engorgement of the neighbouring lymphatic ganglia, but virulent bubo cannot spring up under its influence, they depend

on something specific .. It is a mistake to say that by cauterizing a chancre and healing it too soon, you loose a guide for treatment . The only true guide furnished by a primary ulcer is the induration, and when induration exists cauterization does not destroy it .. In this treatment the sphere of virulent action must be destroyed ..

The acid nitrate of mercury, or a paste made of charcoal and sulphuric acid are excellent agents, or the caustic potassa .. The indurated chancre should be dressed two or three times a day, and by attention they often heal in two or three weeks ..

The local applications are very numerous, a favorite one with Ricord is the aromatic wine, and an ointment of six grains of calomel with two drachms of opiate ointment, or the black or yellow wash may be used ..

In the treatment of Simple Chancres no mercury is required, and every dose administered is a direct injury both to the patient and his sore. There is no need of constitutional treatment at all, but if any is used it should be tonic and stimulant building up the health rather than depressing it.— The great treatment in this class is the local, and although a chancre should not be too frequently dressed in the stage of cicatrization, it is quite otherwise in its stage of increase or Specific progress, because the matter secreted by the sore becomes a constant cause of the disease and for this reason should not be allowed to remain; the dressing should be regulated according to the abundance of the discharge.—

The local use of caustics is in the non-indurated variety the most powerful means of arresting the disease, and we must be careful in destroying

the sphere of virulent activity .- The Nitrate of Silver is one of the best means, and cauterization should be continued as long as the ulcerative stage continues, and when on the removal of the eschars thereby produced any of the characters of this stage continue .-

When the edges are everted and Jagged the acid Nitrate of Mercury is one of the best agents, or the Sulphuric acid paste. An excellent local application is the Potassiotartrate of iron grsXX to water ℥j .-

The aromatic wine, and lotion of Tannic acid, Sulphate of Zinc &c are good agents. Greasy applications are as a general rule hurtful in all chancres and should be avoided if possible. If any tendency to phagedenism occur the ulcer rapidly extending, or rapidly extending and suppurating bubboes, then the treatment proper for phagedenic sores should be instituted .-

Phagedenic Chancres .- It is necessary to study with great care the conditions which give rise to this form of sore .- It frequently happens that a patient lives in an unhealthy, cold damp situation, and we find that when he changes his residence immediate improvement occurs .- Thus if he moves from a warm to a cold climate it often undergoes a frightful increase while in opposite circumstances a rapid cure is effected .-

This variety of chancre depends on a broken down condition of health and occurs in Scrofulous patients, and there is some concomitant visceral disease under the influence of which the disease was developed, this most frequently consisting in some depraved condition of the primae viae which maintains or favors the disease, and which it is our chief duty to obviate or counteract .- If this is aggravated

by bad treatment we cannot hope to cure the ulcer which was determined by it .. We must be ware of attributing this variety of sore to a peculiarity in the nature of the specific cause or a particular intensity of the virus .. This is a common error, and a source of much evil, for the Surgeons who adhere to the old doctrines run to their specific, and administer mercury in quantities proportionate to the poison they wish to counteract .. Nothing can be more injurious than the use of mercury in any way in this form of chancre, it is not uncommon to see these ulcerations extend with great rapidity and throw out troublesome granulations under its influence ..

The treatment must be directed to the constitution as well as locally, and neither will do without the other .. The best constitutional treatment consists in giving iron, quinine, and porter. The

Potassio-tartrate of iron in doses of twenty grains, and locally the combined use of caustics and aromatic wine or tartrate of iron .. Some Surgeons use the strong nitric acid and at once supplant the diseased action .. The cauterization should be deep and frequent and bold enough to follow the ulceration in its progress, and the dressing should be repeated according to the abundance of the discharge; the aromatic wine has a special influence in arresting secretion .. Care should be taken not to rub the edges around in removing the dressing, for if the edges be excoriated each point will become a point of inoculation ..

When the chancre is accompanied by much irritibility and pain we must use Opium, locally and generally, but the nitrate of Silver is not to be neglected, and no error in doctorine should prevent its use because pain and inflammation are present, for

when properly applied it proves the sedative and the most certain antiphlogistic .. It is not uncommon to hear patients demand its application, the acute pain excited at the moment soon ceases and is followed by a degree of comfort unlooked for .. These sores sometimes make no progress towards cure, but either advance or remain stationary, and in these where we cannot destroy the cause we sometimes succeed by using the carrot poultice, or the powerful caustics, actual cautery &c..

When the phagedenism is overcome the sores become healthy, granulations spring up, and rapid healing takes place .. These sores always leave a scar or memorial of their former existence.

Gangrenous Chancre .. When gangrene occurs this is the chief object of treatment, and when this is overcome the ulcer becomes a simple sore ..

Treatment of Buboes .. The various methods of treating the indurated bubo are by pressure, by Blisters, by the tincture of iodine, and mercurial ointment .. A blister about the size of the bubo should be applied and kept on until vesication occurs, the bubo often disappears rapidly.

Ricord vesicates the bubo, and applies a twenty grain solution of the Bichloride of mercury, but this leaves as bad a scar as if the bubo suppurated .. The best method is by applying pressure to the gland, under this it subsides more rapidly than under any other treatment, but they often remain for months as chronic enlargements slow to disappear, and occasionally suppurate from constitutional causes ..

Virulent Buboes .. These invariably inflame and suppurate, and the treatment consists in aiding the breaking of the gland and its discharge by suppuration ..

Hence poultices and warm applications are required

and when suppuration has fully occurred they should be opened .. There is one point which is very important in the opening of buboes of all kinds, that is to let the pus destroy the gland, and when the entire gland is softened down it should be opened, free incisions never being required, unless there is a tendency to diffuse phlegmonous inflammation .. If the bubo is opened in its first stage as soon as suppuration begins, before complete softening we have a chronic lump in the groin which is long in disappearing. The incision should be valvular or by a small subcutaneous opening not admitting more air than possible; often immediate union takes place and a a cure at once established .. In Simple irritative bubo, the best treatment consists in keeping the parts cool with the sub-acetate of lead lotion, applying gentle pressure with rest, and sometimes applying leeches .. As they rarely or never suppurate, no poultices should be applied, until suppuration is inevitable ..

An Inaugural Dissertation on Scarlatina

submitted for the examination of the

Provost, Regents and Faculty of Physic of the University of Maryland for the Degree of Doctor of Medicine by

Napoleon B. Bryan.

In the consideration of this disease with all the varieties, phases, and symptoms, that mark its incubation, progress, and termination it has been found convenient of discription, when divided into three varieties; Viz. They are the same in every respect, except some of their apparent, and most predominant symptoms. The three varieties into which it is divided, is first scarlatina simplex in which the rash is profuse, and the throat affections are very mild, or entirely absent. Secondly. Scarlatina anginosa. In this variety the skin, and

are both decidedly implicated. This is [illegible] more dangerous than the simple form. But there still remains a third variety which proves fatal in [illegible] of the most skillful physician; [illegible] consideration of the fearful character of this division of the disease it has received the name Malignant. The principal [illegible] of this form falls upon the throat, this has led some Nosologists to consider it as a separate, and distinct disease; which [illegible] designates as Cynanche Maligna. It is sufficient proof

that they are the same disease in being [illegible] by the same contagious poison. The malignant variety may be contracted from the simple, or benign. This disease was for a long time blended with others, and was not known as a distinct and separate disease until about the middle of the sixteenth century. It is supposed that this disease prevailed long previous to that time [illegible] its deadly ravages under the head of other diseases. In the year 1748 Doctor Frostingill gave a full description of it, and for a long time often

wards it bore the name of Forthergills sore throat, [illegible] to Dr Withering belongs the honour of first fully describing the main points of difference, between this [illegible] and measles. This disease generally begins with rigors; languor, and pain in the back, and limbs; followed by a frequent pulse, hot dry skin, furred tongue, thirst, flushed face, and muscular weakness. Sometimes there is nausea, and vomiting; frequently severe headache, with other symptoms of nervous disorder such as restlessness, morbid vigilance delirium, coma, or convulsions.

There is almost always some degree of irritation, or inflammation about the fauces, which on examination appears red, and slightly swollen. The tongue is covered with a yellowish-white fur; and is red at the tip and around the edges. It also exhibits prominent papillae upon its surface. The throat affections frequently the most prominent symptom being attended sometimes with impeded respiration, and swelling internally and externally. The rash makes its appearance in the majority of cases on

the second day. It appears on the face, and neck, and then gradually spreads over the whole body occupying a period of twenty-four hours in its diffusion. The rash is sometimes very thin, but much more frequently it covers in the whole body. The colour disappears on pressure but returns on the pressure being removed. Whatever increases the general excitement has a tendency to deepen the rash. The fever never abates on the appearance of the rash, but continues throughout the eruption with different degrees of violence.

The pulse is more frequent in this disease than in febrile cases of the same degree of violence. It is often 120 to 130 beats in a minute sometimes still more frequent. The skin is very hot and dry. The temperature as indicated by the thermometer is frequently as high as 105° and 107° Fer. The fever is often worse towards evening & is frequently attended with restlessness, delirium, & sometimes with comatose symptoms. The bowels are generally constipated in the first stage, but diarrhea

often occurs as the disease advances, and is always to be regarded as critical. This disease is not free from danger from the beginning to the end. Death sometimes takes place in the first stage from the overwhelming shock upon the nervous system, and the same result may take place at any period. Sometimes inflammation attacks some of the vital organs. Disease of the stomach, or bowels, or affections of the larynx have been the cause of death. The patient may sink from debility, or the occurrence of

[illegible] the [illegible]; or the purulent discharge.

In favourable cases the symptoms begin to decline from the eighth to the ninth day. The rash begins to fade; the heat of the skin lessens; the pulse becomes fuller and slower; the throat abates, and the tongue throws off its fur. Desquamation frequently sets in with the decline of the eruption. The cuticle comes off in small branlike [illegible]; except where it is thick as on the palms of the hands, and fingers, it generally comes off in large flakes. The progress of

desquamation is often attended with troublesome itching, and tenderness of the skin. Desquamation usually completed by the end of the second week. This fever is of every conceivable grade from a mild case scarcely worthy the name of a disease to the highest point of violence, and danger. In the simple variety it is often very mild; the first symptom is usually a scarlet blush over the face, and neck which frequently begins to fade about the fifth day; but in some cases of this variety there is a general redness, with in-

pulse, heat of skin, and frequently slight delirium. One peculiar symptom of this variety is the mildness, or absence of the throat affections. There is very little risk in this variety, but there remain hidden some dangerous tendencies, or malignant tendency. In the anginose variety the danger is increased, as the throat affections are more prominently marked in this than in the simple form. This often begins with stiffness, sore throat or pain in swallowing. The eruption is often later coming out. Nor is it so copious, and

regularly diffused as in the simple form. Occasionally it disappears, and returns at intervals. The fever is more severe with with a greater frequency of pulse and a more tendency to stupor. Inflammation of the fauces advances; the eyes become red, and the patient sometimes has a dry cough: hemorrhage from the nostrils sometimes occurs. The tonsils, uvula, and soft palate are of a deep red colour, and somewhat swollen. There can be seen at an early period a coerctive exudation on the tonsils resembling false membra

along with the intervals disease there is more, or less swelling externally in the neighborhood of the prostate or submaxillary glands. The prostate gland is sometimes the seat of inflammation. but more frequently it is the neighbouring cellular tissue or the lymphatic glands. The external swelling is hard and painfull. Deglutition is difficult and sometimes when an attempt is made to swallow they are returned through the nostrils. Sometimes the internal parts are swolen so as to interfere with the breath-
er

The lips are often cracked, and painfull when parted. There is occasionly a yellowish offensive discharge from the nostrils, which is sometimes very acrid and excoriates the [illegible]. Occasionly the inflammation travels back through the eustachian tube to the cavity of the tympanum. The tongue looses its fur at an early period. The incrustation upon the fauces seperates and undergoes gradual absorption, leaving the surface red. The eruption begins to fade a little than in Scarlatina simplex. The fever, and throat

affections gradually subside, and desquamation sets in. Sometimes when the neck has been much swelled recovery is delayed on account of the suppuration that takes place, and various secon=dary affections are apt to occur. It sometimes takes on a typhus or typhoid character which is very likely to prove fatal. During the prevalence of scarlet fever cases are met with where the patient is atta=ched at once with comatose symptoms, or oppression, and great anxiety; the pulse being slender, frequent, ~~fall~~, and

irregular; the surface cold. the respiration slow, or hurried and irregular; the face pale; and muscular power lost. Feble attempts may be made towards reaction, but the resistance of the system soon subsides, and the patient dies on the first or second day. In other cases where there is less violence of the cause, or the energies of the system are greater the earlier symptoms are the same as the anginose variety and the the patient lingers through the disease and gradually ~~becomes~~ convalescent. The signs that indicate malignancy in such cases are violent pains in

the loins, and extremities; a disposition to delirium, or stupor; a weak though not low quick pulse; a late appearance of the rash, and its tendency to a dusky hue. The redness of the fauces is of a deep tint, and more inclined to purple than in the anginose variety. During the advance of the disease the symptoms assume more of a typhous character. The skin becomes less regularly heated. The eruption disappears, or turns purple, the fauces membranous exudation. The fauces is of a dark brown. The throat symptoms become gangrenous

=ves, and deep ulcers form causing distruction of the soft parts. The odour of the breath is foetid, the tongue becomes brown, and covered with a dark cordes; an exhausting diarrhea sets in, and at length colapse takes place, the features sink; the skin becomes cold, and clammy, with a fluttering pulse ending in death about the close of the first or beginning of the second week.

The cause of Scarlet fever is specific and is generally considered as contagious. There is no doubt but it occurs epidemically, and the great peculiarity in the epidemics

are that [illegible] often confined
to a small district. It is a disease
that prevails at all seasons of the
year: but like some others of its
class it is confined chiefly to
children: for persons that are
once affected with it are usually
exempt from it the second time.
The period of incubation is,
but is generally about four days.
There is no disease in which
the result is more uncertain
than this. The mildest case
sometimes terminates in the most
malignant form, and the patient
dies when supposed to be free
from danger, and the most

P. S. — When the disease attacks
Strumous subjects, the most
efficacious remedy known is the
Iodide of Potassium, in doses
of from three to five grains
three times per day = F. A. Bushey

malignant cases sometimes ends favourably. After the patient is seemingly convalescent there is great danger of severe secondary affection for there is no disease in the whole vocabulary of medicine — leaves a longer train of evils behind it than the scarlet fever. The abscess which forms in the neighborhood of the parotid, and submaxillary glands is one of the most common and often very troublesome — especially when they — very large and exhausting. The cellular tissue — present greatly protracted convalescence. Sometimes abscesses open into the — ates and cause a long continued

discharge of [illegible] from the ear.
The coats of the eustachian tubes
are sometimes thickened by the
inflammation causing deafness of
hearing. Occasionly ulcers are formed
in the joints, and testis. Obstinate
diarrhea is another not unfrequent
sequela. But is generally yielded to
prudent treatment. But by far
the most common and sometimes
the most serious sequela is dropsy.
The patient is liable to be attacked
with this disease even while the dis=
charge is going on, and for
a considerable time afterwards.
This is more likely to occur after
mild than severe cases.

It is most frequent in [illegible]
of adults. but is by no means confined to this form. it may be
hydrothorax, hydropericardium, or
even hydrocephalous. This disease
is not considered dangerous except
the heart or [illegible] be concerned
In the beginning of this disease
before the eruption comes out
it might be taken for many other
diseases. The best symptoms by which
it can be distinguished are the
great fragility of the pods, and
redness of the fauces. After the
appearance of the eruption it is
most likely to be confounded with
measles. It may be distinguished

from this by the absence of the catarrhal symptoms, and by the appearance of the [illegible]. The rash of scarlatina appears on the second day, and that of measles on the fourth. In measles the rash appears in similar groups, and in scarlet fever it is diffused over the whole body. A prognosis of scarlatina should always be well guarded. It is not safe to give a decided opinion in this disease in consideration of its never being free from danger. The treatment in the mild cases is very simple requiring nothing more than confinement to the room

and strict abstinence from all irritating food. A gentle emetic at the outset is thought by some writers on this subject to have a very good effect: Ipecacuanah or a mixture of Ipecac and Tart. Emet is the one thought best. In most cases it is found proper to follow the emetic with a purgative dose of calomel, and if this does not operate in the course of six, or seven hours it should be followed by a dose of castor oil, magnesia or one of the saline cathartics. Afterwards the bowels should be kept open by cathartics, taking care to give such ones as would

be most likely to suit the case.
When there is much excitement with
great energy of [illegible] give those
of a depletory character — sulphate
of magnesia for instance. Acidity pow-
ders when there is nausea and
vomiting. Castor oil when there is
abdominal pains. And rhubarb
when the system will not bear
watery evacuations. Great care
being taken not to purge too freely.
In cases of delirium when the
pulse is hard, and strong it
is recommended to take blood
from behind the ears by means
cups, or leaches. The head should
be shaved and cold applied.

In cases where the skin is hot, and dry Sponging with cold water will often ease the sufferings. The patient should be allowed to have cold water as drink frequently. Small doses of citrate of amonia may be given every two. If the stomach is irritable effervescing draughts would be preferable. To counteract nervous symptoms camphor-water, Hoffmans anodyne, or sweet spts nitre, may be added to the diaphoretics. The bicarbonate of soda, or potash is recommended to prevent the disagreable smell that exudes from the patient. If debility should be in stimulants and tonics should

be given. The sulphate of quinia dissolved in one of the dilute mineral acids: or a cold infusion of cinchona are the ones most highly recommended. When the debility is great ether, oil of turpentine, or wine whey should be resorted to; and if nervous symptoms add the assafoetida camphor should be given. The local remedies are very important. In slight affections of the throat demulcents, acidulous, slightly astringent & saline gargles are generally employed. Such as infusion of slippery elm bark, acidulation with muriatic acid or vinegar weak solutions of alum

or common salt. Then gangrene or [illegible] membranous patches are seen in the fauces infusion of capsicum or common red pepper is recommended as a gargle. In children that are to young to gargle it may be applyed by means of a sponge, or camel's hair pencil. When the patches threaten to ~~[illegible]~~ the larynx it is recommended to apply a strong solution of sulphate of zink, or nitrate of [illegible]. The solution should vary in strength from a scruple to a drachm dissolved in an ounce of water. The patient should be guarded against exposure to cold air. The bowels should be kept regular during

the convalescent stage, and if the remains fible with want of appetite quinine, or one of the simple bitters should be given to invigorate the stomach.

If any of the troublesome sequelae follow they should be treated according to the symptoms they present. When the external parts about the neck suppurate emolient poltices should be applied, and the strength supported by tonics and a nutricious diet. In the dropsical affections purgatives and digitalis are the remedies most resorted to. Digitalis is frequently given in combination

with muriate [illegible] of Iron
If there is any indication of inter=
=nal inflammation bloodletting pur
gatives and mercury are resorted
to. Beladona has, and still is
held by some to be a preventative
to this disease, but as a general
thing its power as a prophylactic
remedy is not consideration of any
importance.

An

Inaugural Dissertation

On Cystitis

Submitted to the Examination of

The Provost, Regents & Faculty of

Physic of the

University of Maryland,

For the

Degree of Doctor of Medicine,

By

Henry Clay Nelson,

An inaugural dissertation on "Cystitis" Submitted to the examination of the Provost, Regents and Faculty of the University of Maryland, for the degree of Doctor of Medicine, by Henry C. Nelson,

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Almost all young Surgeons will find in practice that acute inflamation of the bladder is of much less common occurrence than they would supposed to be, from what is said on the subject by most of Nosological writers of the present day.

Cases of retention of Urine and cases of inflamation of the prostate gland, are not unfrequently mistaken for it by persons who are not conversant with diseases of the Urinary Organs.

Acute inflamation of the

bladder, does however, sometimes occur, We have especially the opportunity of seeing it in cases of Gonorrhoea, When there is a sudden suppression of the discharge from the Urethra, the metastasis takes place sometimes to the testicle, sometimes to the prostate glands; at other times, but less frequently, to the mucous membrane of the bladder, The patient has a frequent desire to make water, with a sensation as if there were Urine in the bladder, when in reality there is no Urine in it; and he is continually endeavoring to make water, with the bladder perfectly empty;

There is pain in the perineum and pubes, and the Urine deposits a sediment, which is of a different color and character, in different cases, as I shall endeavor to explain satisfactory hereafter,

With regard to the pulse, it is frequent, the tongue furred, and there is a good deal of Constitutional excitement, These Symptoms may be continued for several days; and in Cases of Gonorrhoea they do not generally subside before the purulent discharge is restored,

The disease is to be treated by taking blood from the Arm, or from the loins by Cups or Leeches, The patient should keep his bed, and the horizontal position, His bowels should be kept open by occasional doses of Castor Oil or other mild Cathartics, Opium may be administered with great advantage, especially in the form of "Clysters", Sometimes the Urine retains the Acid quality, turning litmus paper red; and the sediment deposited is of a reddish or yellowish Color; Sometimes

it resembles pus, If it is of a yellowish color, and not adhesive, Calomel, Tartar Emetic and Hyoscyamus or Opium may be administered three times a day, with Saline draughts, with an excess of Alkali, in the interval, Hip baths, and warm fomentations are of the greatest benefit, almost always giving the patient relief. In other cases the Urine is alkaline, turns red litmus blue; and depositing a small quantity of adhesive mucus, of a reddish brown Color; under these circumstances the Alkaline treatment should be replaced by Mine of Colchicum in doses of fifteen to twenty drops three times a day,

Chronic inflamation of the bladder occurs very frequently as a secondary disease, depending upon long standing stricture of the Urethra, disease of the prostate gland

or kidneys, or Stone in the bladder,

Woman are also liable to it, in whome there exist an ulcerated communication between the bladder and the vagina, As a primary affection it is comparatively rare, However, it occurs as such sometimes; and I have seen a few cases in which it has existed for a considerable length of time, and could not be traced to any disease, I shall describe first, the appearence the disease presents on dissection; Secondly, the Symptoms which the disease produces; and, lastly; the treatment which it requires

The mucous membrane is of a dark red color, in consequence of its numerous vessels ramifying on its surface injected with blood,

As the disease proceeds the discolor-

ation becomes greater, until, at last, the mucous coat becomes almost black from the turgid state of its vessels; at the same time it is somewhat thickened and pulpy to the touch, The inflamation extends up the membrane of the Ureters; which, in their turn, assume much the same appearance as the bladder, The pelvis of each kidney, and the processes of the pelvis, or the infundibula, becomes inflamed also; and these, as well as the Ureters are generally dilated, so as to be more capacious than natural,

This dilitation is greatest when there has been a long continued difficulty of voiding the Urine from the bladder: but it also, exists in other cases, though in a much less degree,

In the advanced stage of the disease, the inflamation has been found

to extend into the glandular portions of the Kidney; and these organs become not only vascular, but enlarged, and of a soft consistence, even approaching in appearance to Medullary tumor,

Collections of muco-purulent fluid, tinged brown with grumous blood, and offensive to the smell, are sometimes found in the dilated infundibula; at other times there are distinct abscesses in the glandular Structure,

In cases where the disease is still further advanced before the patient dies, we find that the inflamation has extended to the muscular tunics, and to the loose cellular tissue by which the bladder is surrounded, There coagulated Albumen is deposited in the cellular tissue, not unfrequently

small abscesses are formed in it; and sometimes after death it is found in a sloughing state, or approaching to it,

Occasionally, but rarely, ulceration takes place on the inner surface of the bladder, and sometimes to a very great extent, As Chronic inflamation of the bladder is, in a majority of Cases, not a primary affection, but a secundary one, the symptoms of it are generally blended with another disease, as of Stone in the bladder in one case; of Stricture of the Urethra, or enlarged prostate in another case, I shall endeavour to describe the Symptoms as nearly as I can, distinct from those of the diseases which it accompanies, such as you find them to be in those cases, in which the inflamation of the bladder is the only existing malady.

The patient has frequent desire to void his Urine, and the Urine, deposits as it cools, a thick adhesive mucus, which clings to the bottom of the vessel,

This mucus is of a grayish color, streaked with white and sometimes with blood, There is pain before making water, and also while the Urine flows, These Symtoms may continue a great length of time without becoming very urgent;

However, they gradually increase in severity, until the irritation of the bladder becomes excessive, and the quantity of mucus becomes so great as nearly to equal the Urine itself, In this last respect, however, there is a vast difference in cases, The Urine ultimately assumes a brownish hue, and is of a most offensive Ammoniacal smell,

The extention of the inflamation to the glandular portion of the kidneys is indicated by still more formidable symptoms, The patient is seized with severe chills; is troubled with sickness and vomiting, with cold extremities, and great prostration of the powers of life; his strength much decreased; his pulse becomes irregular and intermitting; his tongue browns; he sinks, and death takes charge of the patient, In cases in which the bladder is extensively ulcerated, there is excruciating pain in the perineum and urethra, great pain and scalding in making water, a discharge of pus and occasionally of blood; and upon the introduction of a catheter excessive torture,

The mucus, which is deposited by the Urine in these cases, deserves our

especial care. It is thick and viscid, clinging to the bottom of the vessel, and hanging down in long shreds when you attempt to pour it from one vessel to another. It is highly Alkaline, turning red litmus blue. When small in quantity, although the mucus is Alkaline the Urine is often Acid; but when the quantity of mucus is large, it imparts its Alkaline property to the whole of the Urine, which, under these circumstances, is liable to deposit Calculous matter, composed of the Phosphate of Lime, in small masses of the consistence of recently made mortar.

It was the formation of this peculiar mucus which led the older Physicians and Surgeons to apply to this disease the name of "Catarrhus Vesicæ".

It may appear remarkable that

the mucus membrane of the bladder, when in a state of inflamation, should secrete this peculiar fluid, while that of the Urethra, under the same circumstances, secretes a fluid which cannot be distinguished from true pus,

But interesting experiments go far to show that pus from a common abscess assumes all the characters of this kind of mucus on the addition of an alkali,

In the treatment of chronic inflamation of the bladder, you are to consider wether it be a primary or secondary affection; and if the latter, the first thing to be done is, that you should remove or paliate the original complaint; If there be a stricture you must dilate it; if there be a stone in the bladded, you will in vain endeavour to remove the inflamation, without removing the Stone which has produced it; if there be a disease in the prostate

gland, you are to resort to the plan of treatment suitable to this condition, But even in these cases something may be done by other means, towards relieving the affection of the bladder; and when this is the primary disease, of course, these other means are all on which we have to depend, Let the patient remain as much as possible in the horizontal position, When he sits or Stands there is the weight of the whole column of blood, from the head to the pelvis, pressing upon the vessels of the bladder; and blood-vessels become distended which are comparatively Empty when the patient lies down, The horizontal position is as important in diseases of the bladder, as in diseases of the Uterus; as important as an elevated posture and a high pillow in determination of blood the head, and its importance rests upon the same principal,

Opium agrees remarkably well with

patients with inflamation of the bladder.

It may be given by the mouth; or in the form of an Enema at bedtime; and other sedatives, as the Ext: Hyoscyami, or Lettuce, or Poppies, may be administered besides, if necessary. The bowels should be kept in an open state, but no violent or drastic purgatives should be administered.

Mercurial remedies, wether given in the form of Alteratives, or in large doses, so as to produce a constitutional effect, are not beneficial, and are often very injurious.

In very few instances, where the digestion is impaired, small doses of Alkalies combined with light bitters may be given with benefit: but the extensive use of Alkalies is prejudicial, causing the urine to become Alkaline, and the phosphate Salts to be deposited in greater quantities than before. —

The Uva Ursi has the reputation of being very useful in Chronic inflamation of the bladder, I must say that this remedy leads to much disappointment; and we are not likely to see those advantages produced from it, which its general reputation leads us to expect, Pareira Brava is, generally, to be relied on; and with regard to its use, I am satisfied, that it has a greater influence over the disease, which is now under consideration, lessening very materially the secretion of ropy mucus, which, in itself, is of very great mischief, and, I believe, diminishing the inflamation also; It may be administered in this manner;-

Take half an ounce of Pareira Brava, add three pints of water, let it simmer gently, near the fire, until reduced to a pint, The patient is to take a wineglassful every four hours, If so large a quantity of liquid should prove offensive to the Stomach, the Extract of the drug may be

given instead of the decoction, in doses five grains every four hours, The Tinct: of Hyoscyamus might be added with advantage, and in cases where there is much deposit of Phosphates, Muriatic or Nitric Acid may also be added, Very small doses of Turpentine will often be found to answer well in such cases, also, the Balsam of Copaiba, or Cubebs in small doses, You may begin with two or three grains of Turpentine given twice daily, giving somewhat larger doses afterwards

Copaiba and Cubebs will often alleviate the symptoms; but they should administered only in small quantities, if given in large doses they often do mischief. The bladder is accessible to local treatment, and the question very naturally arises, "can anything be done for the patient of this description"! In aggravated Cases, where the Symptoms are at their greatest height; the mildest injection will do harm, rather than good, Some Surgeons recommend warm injections, but with no good to the patient,

They must especially be avoided when the mucus deposited by the Urine is highly tinged with blood, Where however the Symptoms have somewhat abated, the injection of tepid water, or decoction of Poppies is in many instances productive of excellent effects, An Elastic Gum Catheter may be introduced into the bladder; and the injection made by means of an Elastic Gum Syringe, The liquid should be allowed to remain in the bladder for — thirty or forty seconds, and not more than ounce or two, should be injected at any one time,

If the Bladder be disted$^{de}_{v}$ so as to occasion any considerable degree of pain, the effects is always injurious, This operation should be repeated, according to circumstances, once or twice in twenty four hours, When there is further abatement of Symptoms, the disease having assumed a more Chronic Form, and the mucus being free from blood, we may venture to add to the in-

jection a small quantity of Nitric Acid. At first the proportion should not be more than a minim of the strong or ten minims of the dilute to an ounce of water; afterwards this may be doubled, & do not say it should never be increased still further, but if stronger than this, I believe they are not only not useful, but productive of harm. In having recourse to this plan of treatment, it is better to wash the bladder with warm water; then inject the Acid Solution, allowing it to remain for a few seconds in the bladder. At first the injection should be repeated but once in two days; afterwards it may be used daily, but never more frequently than this. If the Urine drawn by the Catheter be found blood, it should be deferred to the following day; and if at any time the injection be followed by much pain, and other symptoms indicating an increase of inflamation, it ought not to be used again until these have subsided, —

I do not hesitate to say, that, with the

precautions above mentioned, be properly considered, this treatment with Nitric Acid will form a valua ble addition to our stock of remedies to be employed in these Cases. The injections are useful, not only when the Chronic inflamation is the primary disease; but also when it occurs as a secondary affection, the result of Calculus in the bladder, or a Chronic enlargement of the prostate Gland,

In speaking of inflam= ation of the bladder, I have considered it as being either of the Acute or Chronic Kind; not only in compliance with general custom, but because I could not otherwise express, conveniently, as that is to be said on such an interesting subject,

The boundaries of Acute and Chronic inflamation of the bladder are not very well defined, There are numerous cases

in which we must hesitate to determine —
whether they may be with most propriety refer-
red to one class or the other, while at one period,
they exibit all the marks of acute inflamation,
exibit at another time, those of a chronic
inflamation with equal distinctness,

A

Thesis on [illegible]

by

Geo. E. H. [illegible]

Baltimore Md.

A

Thesis on Dislocation

By

[illegible]

Baltimore, Md.

Feb 6th 1861

Gentlemen

In Obedience to a requirement, of your honorable body upon each of the candidates for graduation, I will endeavour to indite a few pages upon the Subject of Dislocation.

Dislocation or Luxation, denotes displacement of a joint; the bones remaining entire. There are few bones in the body that may not be displaced, by the application of sufficient force, but there are some, such as the bones of the pelvis, carpus, and tarsus, so firmly bound together, that although by extreme violence the ligaments and other Structures by which they are retained "in Situ" may be injured to such an extent as to admit of the bones being displaced, yet the other effects produced by such Violence are of such a dangerous character, that the mere dislocation of the bones is a matter of minor importance,

The articulations which are principally subject to dislocation, are the ginglymoid and the ball and socket; more especially the latter, the reason for this is very obvious, for the ginglymoid joints are more firmly held in their proper situation by the number and strength of their ligaments; and the natural configuration of the parts, like a hinge only admits of movement backwards and forwards in a single plane; whereas, in the orbicular joints the very shape of the bones, the laxity of the ligaments, and the formation of the joint so as to allow of a great diversity of motion, all contribute to increase the liability to luxation. Dislocations may occur at any age; but more frequently occurs during the middle period of life, in old age, fractures are more common than dislocations, on account of the greater brittleness of the bones, in consequence of diminution of the animal constituent. It is also

of very rare occurrence in early life, in consequence of the great elasticity, rendering the bone more liable to bend than at the other periods of life, congenital luxations are sometimes met with, and are of different kinds. 1st Obstetrical, caused by either too great or improper force during delivery. 2d Spontaneous, caused by articular disease in utero. 3d Functional, dependent on functional disorder of the muscles by reason of nervous derangement, as in club-foot. 4th Original, by arrest of development, the articulations being thereby rendered incomplete; a dislocation may be either Simple or compound. It is called Simple, when the articulation is not laid open. Compound when the head of the bone is not only displaced from its articular cavity, but forced through the integuments, or complicated with a communicating wound of the soft parts,

existing into the joint. The causes of luxation may be considered as predisposing and exciting. Among the former may be enumerated, shallowness in the form of the joint, great looseness of the ligaments, muscular weakness either from debility or paralysis, overdistension of the joint with fluid as Synovial articular disease, and previous luxations, for the more frequently a joint has been luxated, the more liable is it to the same accident. The exciting causes are, like those of fracture Viz. external violence and muscular action. The violence may be either direct or indirect. Dislocation is more apt to occur from indirect, than direct force, as when applied at the end of a long lever exerts an indirect action on the other end, direct force is more likely to cause a fracture than luxation, muscular action

may also cause dislocation, as in case of displacement of inferior maxilla in the act of yawning, When muscular action is the cause, there is scarcely ever any laceration of muscles or ligaments, But when external force, both Sudden and Severe is the cause, there is usually considerable laceration of both muscles and ligaments- bindons may also be torn from their bony attachments. Detachments of parts external to the joint, although it aggravates the injury generally facilitates reduction, Symptoms of dislocation are Signs of displacement more or less obvious, an elevation where a depression should be, or a depression where an elevation should be, and shortening or elongation of the limb, considerable pain - especially if a nerve be compressed by the head of the bone, Motion is very

much impaired, The patient cannot move the part and any attempt to move the limb by the Surgeon is attended by great pain. This immobility is not very distinct at first, in consequence of the muscular relaxation attendant upon the Shock. There is Swelling from three causes, first from the displaced bone, Second from the extravasation of blood, and thirdly, from the occurrence of inflammation, Local paralysis may also occur, from the compression or laceration of a nerve by the displaced bone. It is of great importance that dislocation may be distinguished from fracture, and for this reason a thorough examination Should be made as Soon as possible, for the longer the period between the infliction of the injury and the attempts at reduction, the greater are the difficulties to be en-

-countered. Anesthesia contributes greatly to accuracy of diagnosis, both by exempting the patient from pain and relaxing the muscles, Dislocation can always be distinguished from fracture by the following Viz, by greater immobility, no loss of continuity in the bone, the head moving in obedience to the shaft, more difficulty in restoring the limb to its proper length, and in there being no redisplacement by muscular action, as in the case of fracture. There is also an obvious change in the relative position of the limb, as for example in dislocation of the hip joint the toes are always turned inwards. And lastly and most important of all, is the absence of crepitus, but there may be a simulation of crepitus of a soft and sloppy character entirely different from the dry and rough crepitus of fracture.

Treatment consists in the fulfilment of three indications, first reduction. Second retention, Third prevention of unfavourable Symptoms. The first and paramount indication is reduction, which should be immediately attempted, for if the patient be seen immediately after the accident, is found to be in a State of collapse from the shock of injury, and which by causing relaxation of the Muscles renders the Reduction comparatively easy, but if attempts at reduction be made after Reaction occurs, the Muscles will be in a State of Spastic rigidity which is very unfavourable to reduction. It is clearly proved that Muscular action is the chief impediment to reduction by the fact that Reduction is accomplished with great facility when the accident has happened in a limb affected with

paralysis, or in a weak or relaxed person, or by the patient being debilitated by bleeding housed or any other means, Reduction consists in extension to move the bone from its unnatural position and to bring it on a plain with its articulating Surface, counter extension to steady the latter part, and to admit of extension being satisfactorily effected, and coaptation to replace the surfaces in apposition. During the State of Collapse the Surgeon is generally able to cope with the accident Single handed. But after hours and days have elapsed the obstacles to Reduction are much increased. The muscles have adapted themselves to their new position. The whole Surface of the dislocation is covered over by plastic exudation, which being impediments to Reduction, the indications are to overcome

muscular resistance by gradual and powerful extension and to break up new adhesions and deposits by rotation of the head of the bone. Reduction is effected by either the aid of assistants or by means of a pulley. In recent cases the extension can be entrusted to the efforts of assistants. But in old standing cases extension must be made by rope and pulley, by means of which the force is applied with greater precision and steadiness, for although a sudden jerk may succeed in a recent case, it is both ineffectual and injurious in cases of some duration, for it is more likely to rupture arteries, nerves, and muscles, than effect replacement of the bones. The rigidity of the muscles is to be overcome by long continued extension, then free rotation should be practiced

in order to take up any plastic formation, and lastly coaptating movements should be made. Extension by pulleys is thus made. The patient lying on his back, counter extension is made by passing a broad belt over the chest or under the perineum according to the site of the injury. This is secured behind to some fixed point. Extension is made first by passing a bandage well padded around the limb in order to prevent excoriation, this is secured by means of the "clove hitch" to which one end of the pulley is attached. The other end of the pulley is fastened to a fixed point opposite the patient. The rope is then steadily pulled, the direction in which extension is made varies according to the nature of the dislocation. The extending force may be applied directly or indirectly

according to the Situation in which the extending bandage is applied. It may be attached to the distal end of the bone affected or to the distal extremity of the limb itself, both of these modes have their advocates, but the former one is generally prefered, But there are other powerful means which should always be employed, before resorting to Mechanical force, by which we overcome Muscular resistance and imitate the State in which the patient is found immediately after the reception of the injury. There are Various modes of affecting this purpose A by bleeding from the arm will effect it: or by means of the Warm bath, tartar emetic, tobacco or any powerful narcotic, or undoubtedly the best of them all Chloroform, inhaled until deep anesthesia is produced, when every Voluntary muscle becomes relaxed

as in death, the administration of Chloro-
-form possesses two great advantages, first-by
producing a more thorough Muscular relaxation
than any other agent, and Secondly by ren-
-dering the patient unconscious of an other-
-wise very painful operation, Chloroform
in conjunction with Mechanical force is
very applicable to old Standing dislocations
After having used Chloroform, extension,
counter extension, rotation, and compulsion,
we may Still fail in our efforts at red-
-uction, Under these circumstances the for-
-mation of adhesions and new deposits is
undoubtedly the cause of the failure.
Cases of this kind are Suitable for
the application of Subcutaneous Section,
which consists in passing a Strong
needle into the cavity and breaking up
all adhesions, after which the proper

means for reduction may be supplied. Some joints are more favourable. Situated for reduction of old standing cases than others. Reduction should never be attempted in dislocation of ginglymoid joints after a lapse of thirty days, Ball and Socket joints on the other hand may be reduced after a lapse of five or Six months. But should our attempts in these cases fail, the patient is left in a worse plight than before. For frequently in ball and Socket joints a new articulating cavity is formed which is almost as serviceable as the original joint. Retention is easily accomplished in dislocations, differing considerably in this respect from fracture, for in fracture retention is difficult while reduction is comparitively easy, but in dislocation

Retention is easy while reduction is very difficult. Retention of subsequent evil is generally accomplished without difficulty, for a few days after reduction the patient should be kept quiet and on low diet, and if necessary leeches may be applied, After pain and swelling have subsided, Motion should be gradually restored, assisted by friction, but frequently the muscles remain weak and flacid, and restoration in many cases is difficult of fulfilment, and notwithstanding all efforts, joints often remain for a long time weak and useless. Compound dislocation is a dislocation with a corresponding wound of the integuments through which the displaced bone frequently projects to a greater or less extent. The ankle joint is most frequently the site of this

injury. A compound dislocation may also be complicated with fracture or severe contusion of the bones, laceration of the soft parts, rupture of blood vessels, laceration or pressure upon nerves. These complications are very formidable. At one time these were considered cases for amputation, but now amputation is not considered justifiable from the mere circumstance of the dislocation being compound. For determining on the necessity of amputation the Surgeon is guided by the nature and extent of the complication, the situation and size of the articulation, and constitution of the patient. Amputation is warranted where there is dangerous contusion and extensive, and more especially comminuted fracture, rupture of vessels, and nerves,

considerable laceration of soft parts, and a weak or irritable constitution. When amputation is considered necessary, the proper time for its performance is during the State of Systemic repose, before inflammatory Symptoms and irritative fever has commenced. The only other period at which the amputation can be performed is not only much less favourable but also one which may never arrive, viz, when the above Symptoms have subsided. The question therefore whether or not a limb is to be saved requires an early decision, when it is determined to preserve the limb, the bone should be reduced, the edges of the wound should be brought together and retained in apposition by means of adhesive plaster, evenly and lightly applied so as not to excite

irritation by pressure, every effort should be made to obtain adhesion of the soft parts, and the local and constitutional symptoms should be combatted by the appropriate remedies, But should our attempts at preservation fail, amputation is the last resort, and is the only means which afford the patient a chance for his life. Subluxation denotes an incomplete displacement of a joint, the articulating surfaces remaining in partial apposition, it is however not of frequent occurrence. The causes, symptoms and treatment resemble those of dislocations in a minor degree. The consequences are generally trivial, reduction, retention, and prevention are simple and easily accomplished.

Submitted to the faculty of the
University of Maryland
Geo E. R. Owens.

Baltimore Feb 1861

An

Inaugural Dissertation

On

Delirium Tremens

Submitted to the examination

Of the

Provost Regents and Faculty of Physic

For the

Degree of Doctor of Medicine

By

Wm. Cooper Pennington

Delirium Tremens

This disease follows the suspension of the habitual use of alcoholic drinks, or it may follow the continued use of alcoholic drinks, in the first instance a person being accustomed to the habitual use of alcohol, and that stimulus being withdrawn from him the consequence is cerebral disturbance symptoms most prominent are delusions hallucinations, muscular agitation, and want of sleep.

The disease appears in various forms, degrees and complications, it may be simple, it may be mingled with the direct effects of alcohol on the brain, or it may be connected with accidental disease. The effects of withholding the stimulus are great debility and sinking of the whole system, with anxiety and

agitation of mind which are expressed in the countenance of the patient. He is plagued with terrible imaginations, his spirits greatly depressed, disturbed sleep, muscular tremor, confused thought, derangement of the digestive functions, pulse soft and frequent, and it often yields when the accustomed stimulus is reapplied, should the abstinence be prolonged the disease becomes fully formed, the mind becomes more disordered and his imaginations soon acquire in his conviction the force of reality, he often imagines that spiders are crawling over himself or bed, often falls off house tops in his imagination, and a great many other fearful things.
The number and variety of imaginary

idea's in different persons are great, with all the different object of description, one feature of delirium is rarely absent. The patient is fearful and has particular objects of terror, one is followed by justice, another is assaulted by robbers he often does great injury to himself and others in protecting himself from imaginary foes, very often the patient is calm receives his Physician with civility of manners, answers all questions rationally except those connected with his hallucination, the patient has a peculiar expression of countenance, on careful and accurate inspection, you can detect evidence of fear in his manner even when nothing is said on the subject of his imaginary or mistaken idea's The disease sets in with disturbed rest, and becomes confirmed when obstinate wakefulness

supervenes, and ends when profound sleep comes on, sometimes it happens that the patient gets no sleep for three or four days and often weeks, muscular tremor is a common symptom though not necessary for the existence of the disease, the tremor is mostly perceived in the hands, though generally on close examination it is found to affect the whole system, the tongue is tremulus and the speech is also affected, convulsion may supervene, contracted pupil though no intolerance of light, the pulse weak, feeble and generally frequent, appetite is impaired, tongue furred and moist, constipation is generally a prominent symptom, feted breath, excessive perspiration with an unpleasent smell which is the consequence of great muscular action, the patient

dislikes confinement and is generally able to be on his feet though there is generally great debility, skin cold and features pale, sometimes debility is the cause of death, if the patient exerts himself too much, sleep may supervene in three or four days or a week, which may last for twelve or twenty-four hours, then the patient walks feeble pale and trembling, and his objects of terror are absent, he is inclined to eat and convalescence begins, but the delirious symptoms often remain for several days, and eventually disappear and health is restored if the case is not properly treated it may pass into the third stage, which is distinguished by great depression, Perfect delirium great nervousness takes place it often becomes necessary to confine the patient to his bed, the pulse is

generally feeble and frequent, the features are depressed, and thin, low delirium, coma and convulsions precede death. The disease may be arrested in the first stage if proper treatment is used, without its reaching the second or third stage, the first may be wanting and the patient pass directly into the second stage or fully formed disease, or the third stage may be presented at the commencement of the attack, the duration of the disease varies from three to ten days and occasionally for a longer time. The disease may be complicated with inflammation of the brain, stomach or with surgical injuries, after a prolonged intemperance is indulged in for days and weeks, the brain or stomach or both are irritated or stimulated to inflammation by with-

leading the stimulus we have the symptoms of cerebral excitement, mixed with those which are consequent upon the withdrawal of the stimulus, — those that constitute true delirium tremens, the patient has all the symptoms of inflammation of the brain, mingled with his hallucinations, convulsions are frequent and if not alleviated or [illegible] terminate in coma and fatal prostration, in some instances the symptoms of delirium tremens are unfolded when congestion subsides, in some cases emesis has a tendency to ward off the cerebral symptoms for a time, The disease may be complicated with injuries of different kinds, as fractures, dislocations, and such accidents often owe their fatal termination in drunkards to the supervention of delirium tremens, Delirium Tremens is often

complicated with diseases of different character such as Pleurisy, Pneumonia & many other diseases, lesions found after death nothing has been found in any case of simple delirium tremens to account for the symptoms that present themselves, a large quantity of serum has been found infiltrating the brain sometimes marks of congestion and inflammation are discovered, and this shows that the accustomed drinker may be attacked by inflammation of the membranes of the brain

Causes— The cause of this sort of delirium is the withdrawal of the accustomed stimulus of the brain that this may occur there must be a cerebral habit, and when this habit is better in upon, we have all the symptoms of delirium tremens. These regular drinkers

who — become absolutely dependent but always under the influence of alcohol are more likely to be affected than those who indulge in a debauch once and a while the disease is not confined to any one kind of drink though mostly brought on by the use of the stronger ones. persons that lead an inactive life are more liable to be affected than those who lead an active one. for in those who labor the stimulus is spent on the different functions of the body, and not so much concentrated in its effects on the brain sometimes the abuse of other central stimulants particularly opium, when the habit of taking opium is continued, and any obstruction to its use occurs, the symptoms of delirium comes on, though is doubtless by some

authors. Diagnosis— The disease with which delirium tremens may be confounded are febril delirium, miningitis, and the various forms of insanity. These diseases when well marked, the diagnosis may be made without difficulty, sometimes it occurs that it is difficult and even impossible, the delirium of fever does not generally assume such imaginary terrors, as the ones brought on by the use of alcohol, the fear and horror are absent there is more apparent muscular agitation, with a diffirent appearance of the countenance with heat and dryness of skin, the last stage of delirium tremens are very much like some of the stages of Typhoid fever, and if the case were seen at this time, it would

difficult to decide as to the nature of the disease, but the history of the disease will often enable us to determine which it is. In acute meningitis the delirium is more violent, with greater febrile disturbance convulsions and coma are more apt to supervene, while the hallucinations and tremor of delirium tremens are absent but the two diseases are often conjoined

In making a diagnosis the Physician will be greatly aided by having a knowledge of the former habits of the patient, though intemperate drinking is often concealed from the public and the coming on of the symptoms of delirium is the first event that excites suspicion

Prognosis - of simple delirium tremens

uncomplicated is not very dangerous and with proper treatment generally cured in health, the greatest danger of death is from weakness, particularly from debility after muscular excitement, and if this is watched there is little to fear, the patient may destroy himself accidentally, when the affection is connected with inflammation or active congestion of the brain when it is complicated with a severe injury or happens in the course of other diseases it adds to the danger of the disease and often causes death. stupor, coma, convulsions, extreme frequency of pulse, dry tongue and cold clammy surface are dangerous signs, patients seldom die of the first attack, but each attack that follows

is more dangerous. from the constitution becoming more weakened, and generally there is more organic disease. some persons recover from many attacks, and die eventually of some other disease independent of delirium tremens. Treatment with regard to the view here taken of the pathology of delirium tremens the indications of treatment are first to stimulate the brain to the point necessary to the performance of its proper function. secondly after having thus reinstated the brain to its proper function to gradually diminish the artificial stimulus until the brain is brought back to a healthy condition if the case is not complicated this can be done without much difficulty; provided the

patient is seen at the commencement of the disease, or the system is not to much debilitated, the first thing to be done is too decide what kind of stimulus is to be used, the suspension of alcoholic stimulants brings on the disease, and its restoration will affect a cure and experience has proved that it is the most useful and certain mode to remove the delirious symptoms, and restore the patient to health, though we incur the risk of confirming the patient in his wicked custom and hastening him to his grave. this treatment is injurious if the patient cannot be detained until the habit has been broken, by gradually withdrawing the stimulus, for no sooner

than he is used to health, he returns to his evil habit. it is important that we should have some stimulant that is sufficient to sustain the the nervous system during the disease, and be withdrawn more easily when necessary and we have that stimulant in opium it supports the brain and nervous system and causes the return of sleep and when not required it may be given in diminished doses and by that means be withdrawn, it has been condemned on account of its injurious effects upon the brain. but with proper care no danger need be apprehended. the debility may be urged that the use of opium alone will

not bring about the desired effect and some alcoholic stimulant should be given to keep up the vital powers it should be stimulating and nutritious the malt liquors are best for this purpose. the debility may be so great as to become necessary to use brandy to save the life of the patient, but it should only be given to sustain the proper steingth of the pulse, about the best plan of treatment to follow is two grains of opium or its equivalent quantity of laudanum given every two hours until sleep supervenes or narcotic effect is evinced, if after one or two doses the patient becomes under the influence of the narcotic, the doses should be diminis

ished or the intervals lengthened to three or four if the patient on walking from his sleep should have any tendency to hallucination the medicine should be given in quantities sufficient to avert the tendency to hallucination. should the pulse be feeble and skin cool the patient should have one or two pints of porter or ale or an equivalent quantity of wine in the course of twenty four hours, should the debility be great the patient should be allowed brandy or some other alcoholic stimulant. the stimulus is employed to support the strength and obviate fatal prostration. Tincture of hops in the dose of half a fluidounce every three or four hours often affords the

requisite support to the system and aids the opium in producing sleep. When there is a tendency to convulsion the nervous stimulants should be combined with the other remedies. Assafetida and compound spirits of sulphuric ether are very good in milder cases oil of valerian may be used. The state of the organic functions should be attended to and if the patients bowels are constipated cathartics should be given as the circumstances of the case demands. Calomel should be added to the other remedies if the liver is deranged the bowels should be kept regularly by mild apperients if it is necessary irritability of the stomach may be

guished by limewater and milk if the stomach rejects the opium it may be given by the rectum in twice the quantity. patients sleep should not be disturbed unless it has the appearance of approaching coma when it is a cold clammy skin with sinking of the pulse which would indicate the necessity of stimulants and nutritious substances. when the patient wakes he should have some nutritious and stimulating substances to obviate exhaustion. in cases complicated the treatment should be modified according to the circumstances of the case. should it be complicated with a surgical injury the treatment

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of a simple case should be employed unless the head is the seat of the accident and there is danger of inflammation of the brain but if the disease connected with it is one of debility stimulants should be more freely employed

In regard to the management of the patient the best plan is to allow the patient his liberty as far as is compatible with his safety with a careful watch over his actions but if the patient is weak he should be confined to his bed as the erect position may produce fatal syncope if the patient much debilitated he should never be left alone for the death of the patient may occur from his rising from his bed

The diet should be in accordance
with the circumstances of the case
if there is any local inflammation
it should be mild and unstimulating
generally the patient may use the
lighter kinds of animal food. Debility
must be counteracted by animal broths
milk & punch &c

The most dangerous mode of treatment
is by depletion, bleeding and other means
thinking the disease is inflammation
these remedies are necessary in certain
complications but this mode of treatment
is contra-indicated in the unmixed
cases of the disease

An Inaugural Dissertation

on

"Mercury"

Submitted to the Examination

of the

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of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Samuel Fletcher Powell

of

Maryland. ~

Mercury was not known to the Ancients as a medicine. The Arabian physicians used it externally in cutaneous diseases. Windmann recommended it as an external remedy in Syphilis, in the year 1477. Paracelsus it is said was the first who used Mercury as an internal remedy.

Mercury is occasionally found pure, but generally in combination with sulphur. Its most important mines are found at Almaden in Spain, Idria in Austria and in some parts of Mexico and South America. The metal is obtained by heating the sulphide with lime in iron retorts, with receivers attached to them. By this process the sulphur unites with the lime forming a sulphide of calcium and sulphate of lime, while the Mercury is

distilled over and condensed in the receiver.

Mercury is imported into this Country in cylindrical wrought iron bottles, containing about seventy five pounds each, and comes from the Atlantic ports of Spain. Mercury is a brilliant liquid of a silver white color and without taste or smell: At a temperature of 662° it boils, and solidifies when cooled to -39° when it is soft and malleable.

Effects of Mercury. The local effects differ very much according to the preparation of the metal employed. While Calomel produces very little local effect, Corrosive sublimate acts as a powerful irritant. Mercury in the ordinary metalic state appears to produce no action on the human system, consequently it is not used in this form. When the preparations

of Mercury are given in very small quantities they often act beneficially in the cure of disease without producing any obvious physiological effect.

When given in larger quantities they give rise to a peculiar condition of the system attended by certain characteristic symptoms, the most striking of which is Ptyalism. The symptoms of Ptyalism are tenderness and swelling of the gums, with a pale rose color, and a deep red at the edges near the teeth. The tongue is swollen, the mouth is sore, a metalic taste as of copper, the breath has a peculiar factor, the salivary glands are tender and swollen, and there is an increase flow of saliva. If the remedy be continued the affection becomes greatly aggravated. The tongue projects from the mouth the salivary glands become very painful,

deglutition difficult. The breath offensive, ulceration of the gums, cheeks and tongue takes place. The teeth loosen and fall out, and necrosis of the alveolar process sometimes occurs.

The effects of Mercury upon the glandular system are well-marked. It excites into increased action almost all the secreting glands, but in a less degree than the salivary. The evacuations from the bowels are augmented, ~~exciting~~ by the increase of the Hepatic and pancreatic secretions. The effect upon the blood is to diminish the amount of fibrine albumen and red globules, and increase the water and perhaps the fatty matters, consequently the coagulability is diminished.

The absorption of Mercury is proved from the following facts. When applied to the skin

it in part disappears. After having been administered it has been detected by chemical tests in the blood, the bile, the saliva, the perspiration and urine. It is said to have been found in the brain, the cellular tissue the lungs and in the bones.

There is in different individuals a great difference of susceptibility to the action of Mercury. Upon some a very small dose will sometimes produce a very violent effect, while others are scarcely effected by large quantities. Infants are very insusceptible to the sialogogue operation of Mercury. Salivation being very rare under three years of age. Persons of a nervous and irritable habit are generally easily effected by Mercury and females more readily than males. Climate has a modifying effect upon the

action of Mercury. Experience has proved that much larger quantities are required to effect the system in hot than in cold climates. Habit modifies the action of some medicines to such an extent that they may be administered in very large quantities without producing much obvious effect. Such is not the case with Mercury, when a person has been salivated by it, the system becomes very susceptible to its action, so much so that very small quantities given subsequently sometimes produce very serious effects.

"Therapeutic application of Mercury.

There is perhaps no article of the Materia Medica, concerning which there has been so much difference of opinion as of Mercury. Some consider it deleterious to the constitution

under all circumstances, while others regard it as a useful remedy for almost every disease. When Mercury is indiscriminately used it is capable of doing much harm, but when judiciously employed, there is no remedy capable of doing more good. Experience has proved that Mercury is capable of controlling and subduing diseases that are in no way benefited by other remedies. When Mercury is given so as to produce no obvious effects on the system, its influence is chiefly exerted upon the hepatic function. Many affections are caused, or are greatly aggravated by derangement of the liver. These affections are generally relieved by small doses of Mercury.

In febrile diseases there often exists a congested state of the liver and abdominal

viscera, thereby rendering the secretions of these organs deficient, to correct this condition there is no remedy more valuable than Mercury. This disease often exists in Intermittent and Remittent fevers, a disordered condition of the liver and bowels, before the fever can be cured these conditions must be corrected, the most efficient remedy for this purpose is Calomel. If this preliminary action on the abdominal viscera be neglected the operation of Quinine will be more or less uncertain. As an antiphlogistic agent, Mercury ranks next to blood letting. There is no form of inflammation in which the beneficial effects of Mercury are more strikingly illustrated than in Pneumonitis, after due depletion. In this disease Mercury should be given in doses sufficient to produce

a decided effect upon the system which is indicated by Ptyalism. When the disease occurs in persons of a broken down constitution, or in a chronic form, depletion cannot be carried to any great extent, under these circumstances Mercury, flowers with great efficacy. In both the acute and chronic forms of Rheumatism, Mercury has been used with great benefit. In the acute form of the disease Mercury should be given as a cathartic at first, afterwards in small doses, and repeated at short intervals until the system is brought under its influence. In the chronic form of the disease it should be given for a considerable time, in order that it may produce its beneficial effects.

In Dysentery, Mercury is a remedy of great value. In this disease there is generally a disordered

condition of the liver to correct which Mercury should be administered in small and frequently repeated doses. In Pleuritis Pneumonia and Pericarditis or Endocarditis after due depletion Mercury often acts beneficially when given in quantities sufficient to effect the system.

It is unnecessary to mention every inflammatory affection in which Mercury may be used. So far as the inflammation is concerned there is no exception to the general rule. The state of the blood in certain diseases, forbids the employment of Mercury, though called for by the local affection.

Mercury has been used in the various forms of Dropsy, upon the supposition that it promoted the absorption of the effused fluid. When dropsy arises from chronic inflammation of the liver, from valvular disease of the heart or consequent upon fibrinous

exudation, a form inflammation of the serous membranes. Mercury in combination with diuretics may sometimes be used advantageously. Where dropsy is dependent upon an anemic state of the system or is associated with that form of Bright's disease which consists of fatty degeneration of the kidneys Mercury is strongly contraindicated. In syphilitic affections Mercury has been regarded as a specific for centuries. When the disease occurs in persons that have been previously healthy there is no remedy capable of doing as much good as Mercury. Its beneficial effects are not confined to the primary stages of the disease. For all stages of the disease are more or less benefited by it under certain circumstances. The employment of Mercury in the treatment of Syphilis is objected by some, upon the ground that the disease can

be cured without it. And that it often produces a disease similar to the venereal. Experience has proved, that primary syphilis can sometimes be cured without Mercury but the secondary symptoms of the disease generally appear in a short time. Whereas if the disease be treated with Mercury it yields in a short time and the secondary symptoms very rarely appear. It is true that Mercury can be as injudiciously employed in Syphilis as in other diseases, but to say that it is capable of producing a disease similar to Syphilis is contrary to all experience.

Contraindications to the use of Mercury

When Mercury has been known to act injuriously its use in the same individual should be subsequently resorted to with great caution. The suppurative and gangrenous states of inflammation contraindicate

the use of Mercury. A debilitated state of the system with great nervous irritability, an anemic condition of the system or a constitution broken down by intemperance strongly contraindicate the employment of Mercury. Formerly it was customary to treat Phthisis with Mercury, experience has proved that the disease is always aggravated by it and that the tendency to a deposition of tuberculous matter increased.

In Scrofulous affections there is a disposition to an anemic or otherwise impaired state of the blood, which is believed to favor the formation of tubercules. In these affections the mercurials should be used with great caution.

Modes of employing Mercury. When Mercury is employed for its alterative influence it should not be given in sufficient quantities to

produces Ptyalism. Calomel - Blue Mass, or Mercury with Chalk, may be used for this purpose. For adults the two former are preferable Mercury with chalk being preferable for children especially if there is an excess of acid in the stomach and bowels. When there is constipation of the bowels it is best to administer the medicine at night and follow it in the morning by a dose of some cathartic. Sometimes it is advisable to administer the mercurial and the cathartic together. When it is desirable to administer Mercury with a view to salivation in chronic cases, from one half a grain to a grain of Calomel, or from two to three grains of blue mass may be given three times a day, and gradually increased. If it shall not have produced the desired effect. In acute cases, the same dose may be given, but more frequently repeated.

according to circumstances. With a view to prevent the mercurial from being carried off by the bowels it should be given in combination with small doses of opium, when the latter is not contra-indicated by the disease. When Mercury cannot be given by the mouth or from the urgency of the case it is desirable to bring the system under its influence as speedily as possible recourse may be had to its external application. For this purpose the mercurial ointment may be used. One drachm may be rubbed once or twice a day upon the inside of the arms or forearms or upon the inside of the thighs and legs. Another mode of applying the ointment is as a dressing to surfaces deprived of the cuticle. In urgent cases the ointment may be applied in this way.

Fumigation is another method of employing

Mercury. When Mercurials are heated they generally rise in vapours, which when inhaled are capable of bringing the system under the influence of the medicine in a very short time. This method of employing Mercury is seldom resorted to, for the reason that it is impossible to regulate the dose, and that violent effects have sometimes resulted from its use.

All the official preparations of Mercury, are capable of producing the peculiar effects of this medicine on the system. They vary however very much in degree, rapidity and certainty of their action. Some suppose that they all operate by being converted into the Bi chloride of Mercury. Mialhe is of the opinion that this is true of all the preparations except the sulphides, and that the change into the

bichloride, is not in proportion to the amount of the mercurial present, but that of the alkaline chlorides, and the concentration of its solution. The question may be asked, If all the preparations of Mercury are converted into corrosive sublimate before they produce any effect on the system, why is not this preparation used exclusively. The answer that is given, is that the change into corrosive sublimate is with some of the preparations exceedingly slow, and particle by particle is presented for absorption, as it is formed, so that no irritation of the stomach is produced by it. While it is impossible to administer corrosive sublimate in doses so small and so frequently repeated as to obtain the same end. The slower the preparations of Mercury are converted into corrosive sublimate,

the slower are they in their action. Besides in consequence of the slowness with which the bi-chloride is generated, the milder preparations have the opportunity of reaching the bowels, before the change can take place, and does not like corrosive sublimate exert its first effect on the stomach.

Mercury in its ordinary metallic state, is quite inert. It has been given in quantities varying from an ounce to a pound in obstruction of the bowels which it is said to have sometimes overcome simply by its weight, the metal passing through the bowels unchanged. Mercurial pills or blue mass is prepared by first rubbing mercury with confection of roses, till the globules disappear, and then beating the mixture with powdered liquorice into a pilular mass,

or be made into pills as directed by the United States Pharmacopoea. each pill weighs three grains and contains one grain of Mercury.

It is probable that a minute portion of the oxide of Mercury is formed by the absorption of oxygen during the trituration. This is one of the mildest of the mercurials. producing the alterative and sialogogue effects of Mercury, with little irritation of the stomach and bowels. In the alterative influences of the medicine the dose is from two to five grains. given every night or every other night. When it is desirable to bring the system under the influence of the remedy it should be given in doses of from three to five grains and repeated three or four times a day, until its effects on the gums are perceived. When given as a laxative the dose is from

five to fifteen grains.

Mercury with chalk is prepared by rubbing together three parts of Mercury and five of prepared chalk until the globules of Mercury disappear. This is the mildest of the mercurials and is often preferred in infantile cases for this reason and for antacid properties of the chalk. The dose for an adult is from five to thirty grains and for children two or three grains.

Mercurial ointment. This is prepared by rubbing together Mercury, lard and suet in certain proportions. The triturations to be continued until the globules of Mercury disappear. When this ointment is rubbed upon the skin or applied to blistered surfaces it is capable of producing mercurialism, and is frequently employed for this purpose. In venereal buboes,

glandular swellings and in tumours of various kinds this ointment may be rubbed upon the part affected with much benefit. As an application in erysipelas & chilblains it is said to have done much good.

Oxides of Mercury. There are two oxides of Mercury, known as the Protoxide and Deutoxide. The Protoxide is prepared by decomposing Calomel by means of a solution of Potassa, or by lime water. This is seldom prescribed as an internal remedy. It being used chiefly as an external application to syphilitic ulcers, in the form of black wash, made by agitating a drachm of Calomel in a pint of lime water. The Deutoxide or (red oxide of Mercury) is prepared by dissolving Mercury in Nitric acid and evaporating the solution to dryness, and exposing the residue to heat.

This acide is a powerful irritant and is used ex-
clusively as an external remedy in syphilitic and
other ulcers.

There are two officinal Chlorides of
Mercury known as the protochloride (Calomel)
and the bichloride (Corrosive sublimate). Calo-
mel is prepared by first forming a sulphate of
the dualoxide of Mercury by boiling sulphuric acid
and the metal together to dryness. This is then
rubbed with a quantity of Mercury equal to
that which it contains and afterwards with
Chloride of Sodium in a certain proportion and
finally submitted to sublimation. Calomel
is decomposed by the alkalies and alkaline earths,
the alkaline carbonates soaps and the soluble
sulphides. Calomel is converted into Corrosive
sublimate by Nitro-Hydrochloric acid.

Calomel by the change it undergoes when in contact with the liquids of the body is rendered soluable and produces all the effects on the system which characterize the Mercurial preparations. As an alterative from half a grain to two grains may be given every night or every other night. To obtain the general Mercurial effect as indicated by the sore mouth in chronic cases from half a grain to a grain may be given three times a day and increased if necessary. In acute cases much larger quantities should be given and repeated more frequently. As an external application Calomel has been used for various purposes. It has been snuffed up the nostrils in Ozaena, blown into the eyes in Chronic Opthalmia, introduced into the larynx in Chronic inflammation of that organ and has been used

in the form of ointment as a dressing for ulcers and cutaneous eruptions.

Bichloride of Mercury (or Corrosive Sublimate). This is prepared by first forming the sulphate of the dueto-oxide of Mercury and afterwards submitting this to sublimation in connection with Chloride of Sodium, an interchange of principles takes place by which the sulphate of Soda and Bichloride of Mercury are formed; of which the former remains behind and the latter passes over in vapour and is condensed in receivers. Corrosive Sublimate is decomposed by the alkalies and alkaline earths, and the alkaline carbonates by the soluble salts of Lead and Iodide of Potassium. With albumin and fibrine corrosive sublimate forms insoluble compounds which are dissolved by acid and

and alkaline solutions.

When corrosive sublimate is applied exter-
-nally it produces irritation and inflammation
of the part. When given internally in small
doses it produces the effect of Mercury on the
system with little disturbance of the stomach
or bowels. This preparation is less liable to
salivate in ordinary doses than other mercurials.

Poisonous effects. When Corrosive sublimate
is taken in large quantities it acts as a powerful corrosive
poison. The symptoms are a strong metalic taste
a sense of constriction and burning in the Oesophagus
excruciating pain in the stomach. Nausea and frequent
vomiting of Mucous mixed with blood. There is gener-
-ally violent purging, the stools sometimes contain
blood. There is cramp in the extremities and
convulsions sometimes occur.

Treatment of Poisoning. The stomach should be well washed out by the free use of demulcent drinks, with which some antidote should be administered. Albumen in the form of white of Eggs should be given in large quantities. If Albumen cannot be had, Milk or wheat flour should be given. These may not neutralize the poison completely, yet they tend to lessen its activity. The hydrated protosulphide of iron has been recommended as an antidote to corrosive sublimate. After the stomach has been cleansed a cathartic should be given with the antidote, and measures afterwards employed to counteract the inflammation or irritation, for this purpose Opium is one of the most valuable remedies.

Corrosive sublimate is less used than some of the other preparations of Mercury,

on account of its occasional harshness of action, when given in such doses as to insure a decided impression on the system. The diseases to which its use is chiefly confined are secondary Syphilis, Chronic Rheumatism and some forms of Cutaneous symptoms. The dose is from the one sixteenth to the one eighth of a grain, three or four times a day, should it produce irritation of the stomach or bowels the dose should be diminished or a little Opium combined with it.

In conclusion an agent so powerful for good, improperly administered is equally potent for harm. The Liver does not constitute the entire body, as one might suppose from the prescriptions of the last generations of Doctors, or indeed from those of some of the present day.

Truth generally lies between extremes. Those who under any circumstances denounce the use of Mr. enemy would deprive us of a very valuable agent, while those who prescribe it on every occasion will frequently be disappointed in the results to their chagrin and the misfortune of their patients. A mind enlightened by science and directed by a sound judgment is the best guide in its administration.